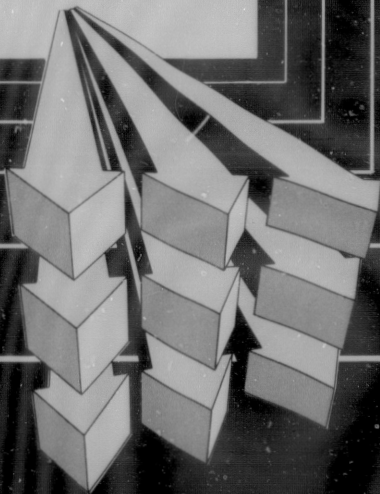


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**Australian
Bureau of Statistics
Annual Report
1986-87**





Australian Bureau of Statistics

Annual Report 1986-87

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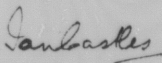
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The Honourable P.J. Keating, MP
Treasurer of the Commonwealth of Australia

In accordance with the provisions of section 24(1) of the *Australian Bureau of Statistics Act 1975*, I hereby submit to you, for presentation to Parliament, this Report for the year ended 30 June 1987.



I. Castles
Australian Statistician

28 September 1987

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Notes. In this Report after the first reference the Australian Bureau of Statistics is referred to as the Bureau or the ABS, and the Australian Statistics Advisory Council as the Advisory Council or ASAC.

The contact for any inquiries or further information on the contents of this Report is the Assistant Statistician, Co-ordination Branch at the Cameron Offices, Canberra - telephone (062) 52 5256.

3

1 THE ABS IN 1986-87 : AN OVERVIEW

During 1986-87 the Australian Bureau of Statistics continued to devote the major proportion of its effort to maintaining, in both quality and quantity, the statistical service it provides to Australian governments and to the community generally. A total of 1 670 printed publications was produced and distributed to approximately 46 000 regular (mailing list) clients.

Substantial cuts (amounting to \$8 million) were made in the Federal Budget for 1986-87 to the work program proposed by the ABS. In order to continue with the major elements of the work program, especially the periodic retail census which was to be collected in that financial year, significant changes were made to the ABS work program. These included:

- cancellation of the 1986 Population Census preliminary processing;
- cancellation of the 1985-86 Manufacturing Census;
- cancellation of the Commonwealth and State Year Books for 1987;
- deferment of an energy survey planned for 1986-87;
- scaling down of foreign ownership and control studies; and
- reductions to sample sizes, data requirements etc of some surveys and general reductions in ABS service divisions.

While these changes affected some elements of the ABS work program, a number of activities and significant achievements worthy of mention occurred during the year.

The ABS has developed its first corporate plan which will be implemented early in 1987-88 - details of the plan are shown in Chapter 2. In formulating the plan, ABS management has recognised that the future of the Bureau, like that of any other government agency, will be affected to some extent by the external environment within which all government agencies operate. But it is also appreciated that, to a much larger extent, the future of an organisation such as the ABS depends upon its capacity and willingness to define its mission, set out its objectives and create the conditions in which those objectives can be achieved.

Continuing consideration is given by the ABS to keeping its requirements of respondents to the minimum compatible with meeting the priority needs of users of statistics. Specific steps were taken in several major collections which reduced overall respondent load during 1986-87. These included use of sampling measures in the retail census, reduction in sample size and data requirements in foreign investment surveys, exclusion of many small establishments from the annual agricultural census, and the one-year cancellation of the manufacturing census.

The ABS has commenced a review of its economic statistics collection strategy. Aspects which will be covered include an examination of the appropriateness and relevance of current statistical output, the likely impact of technological change on the collection and processing of economic statistics, the possible increased use of administrative data, and the potential for reducing respondent load in economic statistics collections.

In keeping with its plans to extend the use of the latest electronic methodology for the dissemination of statistics, the ABS introduced its TELESTATS service for the supply of overseas trade statistics to regular users. TELESTATS uses Telecom's 'Telememo' facility to transmit the information.

The tenth review and reweighting of the Consumer Price Index (CPI) was completed during 1986 and the new, eleventh series was introduced in April 1987 with release of the CPI for the March quarter 1987. A major change adopted for the eleventh series was in the treatment of home ownership costs. For the new series it was decided that prices of houses should no longer be represented directly in the CPI, but housing mortgage interest charges are now included. It was also decided that consumer credit charges should be included for the new series.

The 1985-86 Retail Census was a major periodic collection undertaken during the year. Only a sample of retailers was required to provide the more detailed statistics, with most retailers reporting only a limited range of information. The census results will be released progressively during 1987-88.

Finalisation of questionnaires and operating procedures for the first ABS economic survey of the services industries occurred during the year. The survey, to be conducted for reference year 1986-87, will obtain details about major tourism and personal services industries and represents a significant extension of the ABS's program of integrated economic censuses and surveys. It is proposed to conduct a second survey, concentrating on the business and technical services industries, for reference year 1987-88.

Having successfully conducted the eleventh national census of population and housing on 30 June 1986, the Bureau turned its attention during 1986-87 to the huge task of processing responses in the six million census forms collected. Processing, at the central data transcription centre established in Sydney, has been completed and in April 1987 the first 1986 Census results were published. Publication of progressively more detailed statistics will continue into 1988.

The 1986 Census was well received by the public. This was due, in large part, to careful topic evaluation, extensive form testing and the successful public awareness campaign conducted in the months leading up to census day.

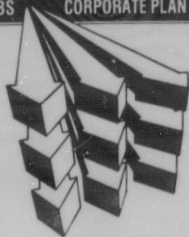
During the year the Bureau successfully conducted a survey of major labour costs incurred by private sector employers in 1985-86. Information was collected about the cost to employers of employees' earnings, payroll tax, workers' compensation and superannuation. The collection of additional labour costs information is planned, so that estimates of costs per hour worked and per hour paid for can be constructed. Public sector employers will be included in future ABS labour costs surveys.

In March 1987 the Bureau published the results of a detailed research project which investigated the effects of government benefits and taxes on the income of Australian households. The results relate to the distribution of household income in 1984 and are based primarily on information collected in the ABS's 1984 Household Expenditure Survey.

To complement those statistical series available in seasonally adjusted form, the ABS recently introduced trend estimates for certain main indicator statistical series. These trend series are produced by removing the regular seasonal and trading-day effects, and by damping the effects of remaining irregular influences to provide a more reliable measure of longer term trends.

A major project aimed at improving the performance of ABS statistical forms is underway, following a review by the Communication Research Institute of Australia. This involves the development of standards and guidelines, the use of modern technology for forms development, and the evaluation of forms performance to assess their impact on respondents and the quality of data that is supplied.

The ABS continually reviews the usefulness of the ways in which it presents the results of its work, both in terms of presentation of its publications and analysis of the statistics and related information. An assessment of the role of a national statistical office, with specific reference to its role in the analysis of data, was given by the Australian Statistician in an address to the Statistical Society of Australia, and, because of the interest that has been generated by that address, an abridged version is included as Appendix 10 to this report.



2 ABS CORPORATE PLAN

The ABS has embarked on a process of strategic management, and the first corporate plan has been produced. It was developed after considerable senior management discussion and debate, and after the views of the Australian Statistics Advisory Council, whose members represent a wide range of interests, were obtained.

The ABS has embarked upon strategic management because ABS management wants to influence what the ABS does and how it operates in the future. Specifically, the Bureau's first corporate plan:

- gives the ABS a way to identify and cope with change,
- gives the ABS a chance to shape its own future,
- provides a framework for the operational plans in the ABS forward work program,
- gives the ABS something to check progress against,
- gives the ABS a vehicle for changing its directions deliberately in future if needed, and
- helps to give everybody in the ABS a better understanding of the organisation's role, and their role within it.

Structure of the corporate plan

The model which has been used for the ABS Corporate Plan includes:

- an Introduction and Situation Analysis,
- a Mission Statement, which tries to encapsulate in a few words the purpose of the ABS as an organisation,
- a statement of ABS Corporate Ethos, which lists the issues which are believed to be fundamental to the ABS carrying out its mission, and
- a statement of objectives and strategies, which identifies the main things the ABS is going to address (objectives) and the main directions for change which the ABS intends to pursue (strategies).

Situation analysis

As a first step in the process of change, senior ABS management has on a number of occasions discussed what it sees as the key issues confronting the ABS as it seeks to develop a responsive statistical service. These issues, which have also been considered at several meetings of the Advisory Council, are as follows:

- What is the role of the ABS in providing statistical services to:
 - the Commonwealth and State Governments and their agencies,
 - the private sector,
 - community organisations,
 - research bodies, and
 - individual citizens who wish to inform themselves about the Australian economy and the Australian society?
- How far should the ABS extend its activities into analysis of the data it collects?
- What can be done to ensure the widest possible dissemination of ABS information? Are the existing mechanisms adequate?
- How can the ABS take maximum advantage of advancing technology in collecting, compiling, analysing and disseminating statistics?
- What is the role of the ABS in fostering statistical standards, including standard classifications?

It has been concluded that the ABS program of collections must be sensitive to the real needs of decision makers both in the public and private sectors, and capable of speedy modification to respond to new needs as they emerge; it is believed that delivery of the required information must be efficient and effective; and it is considered that the ABS can best achieve the goal of producing accurate, timely and impartial statistical information when the ABS analyses that information and publishes the results of that analysis. This does not, of course, relieve the ABS of the obligation to assist those (both within government and outside) who wish to undertake independent analysis of ABS data.

The ABS wants to be, and be seen to be, a high quality, professional organisation in the statistical world - both within Australia and internationally. This means that the Bureau needs to be at the forefront of statistical research activity, methodological development and technological developments in areas of particular relevance to national statistical agencies.

These are ambitious objectives, which it is realised will only be achieved under the right conditions. These are:

- a strategic management approach,
- a commitment to the participation of staff in the processes of defining the role of the ABS and in considering how that role should be carried out,
- effective administrative processes,

- responsiveness to governmental initiatives for the improved efficiency of the Public Service, and
- a recognition that, in the final analysis, the success of the ABS in achieving its objectives will depend on establishing the conditions in which the skills, energies and enthusiasm of the staff of the organisation at all levels are used to maximum advantage.

Mission statement

The mission of the ABS is to assist and encourage informed decision-making, research and discussion within governments and the community by providing a high-quality, user-oriented and dynamic statistical service; this includes actively co-ordinating statistical activities across government agencies and promoting the use of statistical standards.

Corporate ethos

In fulfilling its mission the ABS adheres to the following fundamental corporate beliefs:

- People are recognised as the key to superior performance and achievement. Accordingly, the ABS seeks to foster their professional, personal and social well-being.
- The ABS recognises that the provision of an effective and cost-efficient statistical service to the government and the community involves a continuing awareness of the needs of users for statistical information in a changing economic and social environment; the ABS seeks to maintain a reasonable balance in its output and to respond appropriately to such changes.
- The ABS gives due consideration to the burden placed on respondents and maintains their trust by ensuring in its release of information that the legislative requirements for confidentiality are met.
- The ABS remains objective and independent in the presentation of statistics and will maintain high standards of quality in the information provided.
- The ABS makes available to all of its users the full range of statistical information resulting from its activities.
- The ABS strives to achieve a high level of effectiveness and efficiency in fulfilling its mission.
- The ABS strives to attain recognition as a high quality, professional organisation by participation in national and international forums and by provision of professional advice and consultancy.

Objectives

ABS objectives are to:

- Ensure that the statistical service is balanced, timely and relevant to the current and evolving needs of its users.
- Produce a high quality product.
- Extend and improve its statistical service to users.
- Co-ordinate the statistical activities of Federal agencies and, within the terms of legislative agreements with State governments and in conjunction with State government co-ordinating bodies, fulfil a similar role for State agencies.
- Develop, maintain, implement and promote the use of standard classifications, frameworks and definitions to help ensure the compatibility and comparability of data derived from different statistical systems.
- Ensure an appropriate balance between the benefits resulting from collecting information and the costs incurred both by respondents (government agencies, businesses and households) and by the ABS.
- Promote its services to those involved in investigating, advising, deciding upon and implementing economic and social policies, through the maintenance of active and on-going personal contact between its senior executive staff and Ministers, senior government officials, academics and other community leaders.
- Foster the development of its staff to meet their needs and those of the organisation, with the main aims of increasing job satisfaction, improving productivity and enhancing career paths.
- Continue to look for more cost-effective ways of undertaking its activities and for improvements in its productivity.

The objectives of the corporate plan will be achieved through action based on a range of detailed strategies. Copies of the ABS Corporate Plan can be obtained from the Assistant Statistician, Co-ordination Branch, telephone (062) 52 5256.

The corporate plan was distributed to all ABS staff in August 1987, and presentations, including a special video introduction, will be made by senior managers to all staff. These presentations and ensuing discussions are an essential part of the process of involving all staff as fully as possible in the strategic management process. Comments and suggestions from staff will be given careful consideration in the updating and improvement of the first plan during the first part of 1988.

3 HEALTH STATISTICS AND THE REPORT OF THE BETTER HEALTH COMMISSION

Criticism by the Better Health Commission

During the debate in the Parliament on the Australian Institute of Health Bill 1987, a number of speakers referred to criticisms of the ABS and of the standard of Australia's health statistics which had been made by the Better Health Commission in a report tabled in the Parliament in October 1986. Although the comments on statistical matters made up only a small part of the Commission's report, the ABS was seriously concerned at the criticisms made. This chapter reviews the state of Australia's health statistics and answers the criticisms made by the Better Health Commission.

The Commission claimed that 'there are major deficiencies in the collection of health statistics in Australia, and although this situation has been acknowledged by governments for over a decade it remains unremedied'. Under the heading 'Why are our health statistics so poor?' the Commission also alleged that 'within ABS there has been a lack of enthusiasm about health statistics and, indeed, an apparent lack of understanding of their social purpose and importance'.

It is regrettable that the Better Health Commission did not approach the ABS during the compilation of its report.

The statement that major deficiencies in health statistics have remained unremedied for over a decade gives the impression that there has been little or no development in health statistics over this period. This is far from being the case.

Health statistics 1977-1987

Ten years ago, virtually all of the resources of the ABS health 'program' were devoted to processing individual hospital discharge forms. Although the hospital morbidity collection did not cover all hospitals in all States, about two million forms a year were being processed. To put this figure into perspective, the National Hospital Discharge Survey conducted by the National Centre for Health Statistics in the United States is based on a sample of less than 250 000 medical records annually.

The enormous processing load which was being carried by the ABS in handling hospital discharge forms could not be justified on statistical grounds. Some 66 staff were engaged full time in processing hospital discharge forms, a greater input of staff resources than was then employed in all of the Bureau's other social statistics activities put together.

Following a discussion of the problem at the annual Conference of Statisticians of the Commonwealth and States in 1977, the report of the Conference recorded that:

Conference recognised a need to reassess the ABS role with a view to freeing resources for use both in improving the quality of the morbidity collection and in increasing the range of statistics in other related areas, which to date had been given scant attention because of resource constraints.

Four additional factors indicate a need for reassessment of the ABS role:

- The ABS processing of the hospital morbidity collection involves a substantial production of information which is used primarily for hospital and other health administration purposes.
- In most States the ABS is involved in providing to hospitals data relating to individual patients, and issues of access to and confidentiality of information relating to individuals could arise.
- State health authorities are gaining access to computer facilities. An increasing number of larger public hospitals regularly use computers to aid management and administration.
- ABS computer re-equipment plans involve the phasing out of separate computers in State Offices. Difficulty could be experienced in accommodating in the new computer environment differing computer programs to provide information for hospital and health administrative purposes that differed from State to State.

Conference acknowledged a continuing high priority for the development of morbidity statistics, but considered that this development required a division of functions between the ABS and health authorities. It was agreed that the ABS should negotiate with State health authorities with a view to their undertaking the responsibility for coding and data capture of hospital morbidity and for providing the ABS with data for statistical purposes in computer readable form.

The negotiations proved to be long and difficult, largely because of provisions in the Arrangements between the Commonwealth and the States relating to the compilation of hospital statistics. The outcome has been, however, that coding and data capture relating to the vast majority of hospital discharges in Australia is now undertaken by the institutions concerned, thereby freeing significant resources for the expansion and development of health and other social statistics. In an environment of expenditure restraint in which there has been virtually no change in the total operative staff of the ABS, the staff resources devoted to the Bureau's social program have increased from 134 staff years in 1978-79 to 173 staff years in 1986-87.

The resources which were freed as a result of the reduction in ABS involvement in the processing of individual records of hospital discharges have been redirected to a large range of new national health surveys. Over the past decade the ABS has conducted two major national surveys covering health usage and health status

(1977-78 and 1983), a national survey on alcohol and tobacco consumption patterns (1977), six national surveys of health insurance (1979, 1980, 1981, 1982, 1984 and 1986), a national survey of the handicapped population, which included a survey of institutions (1981), a national survey of the rubella immunisation status of females aged 15-34 years (1983), a national survey of children's immunisation (1983), and a national survey of children's dental health (1983). In addition, a number of health surveys have been conducted by the ABS in individual States, including two alcohol consumption pattern surveys (South Australia 1983, Western Australia 1985), a smoking survey (Queensland 1985), a health risk factor survey linking information on cigarette smoking, alcohol consumption and whether or not persons did regular vigorous exercise (New South Wales 1985) and an alcohol, tobacco and analgesic survey (Northern Territory 1986). The results of these surveys have been in strong demand, and have been disseminated in a wide variety of forms.

The ABS has also produced special publications from the Census of Population and Housing, summarising the characteristics of persons employed in health occupations and the characteristics of inpatients of health institutions. These summaries were prepared for the first time after the 1981 Census and will be produced for the 1986 Census as soon as relevant results are available.

Several health-related collections have also been undertaken by ABS State Offices, such as the census of long stay patients in hospitals and nursing homes in NSW and the regular census of health and welfare establishments in Queensland. Several social reports on health have been compiled at the national and State levels and issued either as chapters in social indicator publications or incorporated into publications relating to specific groups including the aged, the handicapped, women, youth and the low income population. The Victorian Office of the ABS has produced a separate report on health in that State, based on the results of the 1983 ABS national health survey.

In addition, the ABS has made significant contributions to occupational health and safety statistics, maintaining regular collections based on workers' compensation records and recently contributing to the development of national standards in this area. In the area of nutrition, information is available from the 1984 Household Expenditure Survey on expenditure by Australian households on about 100 separate food and drink items. An annual bulletin is also produced by the ABS, reviewing the aggregate supply and utilisation of about 130 basic foodstuffs and estimating the per capita supply of selected types of foodstuffs and nutrients available for consumption.

The ABS also provides other statistics which are sought by the health community, including those relating to births, deaths and cause of death; populations in small geographical areas (from the population census); and employment and earnings data for the health sector from the survey of earnings and hours. Expert advice has been provided to a number of health agencies at the Commonwealth and State levels by ABS officers outposted to these agencies to work on various statistical projects.

In 1986-87 the resources allocated by the ABS to health statistics amounted to 62 staff years. Costs were estimated at \$3.8 million, of which \$1.6 million were direct costs.

Setting statistical priorities

As the Better Health Commission did not consult with the ABS in the course of producing its report, the Bureau does not know what led the Commission to its conclusion that there is an apparent lack of understanding of the social purpose and importance of health statistics within the ABS. However, there are some comments in the Commission's report which appear to indicate some lack of awareness on the part of the Commission of the wider context within which decisions on the allocation of resources for statistical collections must take place.

The Commission stated, for example, that 'There is an urgent need for a periodic or continuing national risk factor survey. The absence of data on preventable factors related to the major causes of death is inexcusable.' The word 'absence' in the last sentence is something of an exaggeration. However, the more important point is that any judgement that the 'urgent need' for a particular statistical collection must be satisfied at the expense of other priorities can only be made on the basis of a full examination of the alternatives. The Better Health Commission did not possess the information necessary to make such a judgement.

Under Part III of the *Australian Bureau of Statistics Act 1975*, the Advisory Council is required 'to advise the Minister and the Statistician in relation to -

- (a) the improvement, extension and co-ordination of statistical services provided for public purposes in Australia;
- (b) annual and longer term priorities and programs of work that should be adopted in relation to major aspects of the provision of those statistical services; and
- (c) any other matters relating generally to those statistical services.'

One of ASAC's sources of advice on statistical priorities was to have been the National Committee on Health and Vital Statistics (NCHVS). This Committee was established in 1975 following a request by the Australian Health Ministers' Conference. Its terms of reference were to advise on the development, co-ordination and rationalisation of health statistics and to 'inform the Australian Statistics Advisory Council on priorities on health statistics.' This latter role was never performed.

Despite this lack of advice from NCHVS the Advisory Council, which has always included a person with special interests in health statistics, has given careful consideration to proposals for the inclusion of 'a periodic or continuing national risk factor survey' on several occasions. In the past ASAC has not supported the inclusion of risk factor surveys in the ABS work program because of difficulties in collecting reliable data and because it judged that the value of the additional data obtained relative to costs incurred was not as great as for other statistical collections in the health/welfare area. The comment of the Better Health Commission about the alleged absence of risk factor data is therefore as much a criticism of ASAC and

NCHVS as of the Bureau. Certainly the ABS does not accept that it is 'inexcusable' for it to have accepted the advice of the Advisory Council which has been appointed to advise on such matters.

In 1985 the Australian Medical Association expressed the view that there had been 'a lack of effectiveness on the part of the health community in submitting proposals to the Bureau or to the Australian Statistics Advisory Council'. The report of the Better Health Commission suggests that that comment may have been justified. The Commission's report did not even mention the existence of ASAC. By recommending that the Bureau be '*directed* to employ its expertise and start a comprehensive collection of statistics on major risk factors' (emphasis added), the Commission was effectively suggesting to the Government that the mechanisms which the Parliament had established for determining the 'annual and longer term priorities and programs of work ... in relation to ... statistical services' should be by-passed.

The future

During 1986-87, legislation was enacted establishing the Australian Institute of Health (AIH) as a statutory authority. The AIH has important statistical functions, which are listed in section 5(1) of the *Australian Institute of Health Act 1987* in the following terms:

- (a) to collect, with the agreement of the Australian Bureau of Statistics and, if necessary, with the Bureau's assistance, health-related information and statistics, whether by itself or in association with other bodies or persons;
- (b) to produce health-related information and statistics, whether by itself or in association with other bodies or persons;
- (c) to co-ordinate the collection and production of health-related information and statistics by other bodies or persons;
- (d) to provide assistance, including financial assistance, for the collection and production of health-related information and statistics by other bodies or persons; ...'

It is the Bureau's hope that the establishment of the AIH on a statutory basis, and the appointment of the Australian Statistician as an *ex officio* member of the Institute, will provide a focus for the more effective presentation of priorities and needs in the health statistics area in the future. The ABS considers that the standard of Australian health statistics has greatly improved. Although there is certainly scope for further improvement, the Bureau believes that the criticisms of health statistics by the Better Health Commission are exaggerated, and that there is no foundation for the Commission's comments about the Bureau's lack of enthusiasm and understanding.

In co-operation with the AIH, State and Territory governments, a revitalised NCHVS and the health community generally, the ABS will maintain its efforts to further improve the quality and extend the range of Australian health statistics in the years ahead.

4 PROGRAM BUDGETING - ABS PROGRAM

Program budgeting

During 1986-87 the ABS adapted its program/project system, which has been the fundamental basis of ABS management and planning for the last decade, to comply with the program budgeting system being adopted by all Commonwealth agencies. Under program budgeting concepts the ABS constitutes a single program, with two sub-programs, *Statistical Operations* and *Corporate Services*. These sub-programs are split into 37 components and 104 sub-components (corresponding directly with the long-standing ABS program/project structure).

A schematic presentation of the ABS program budgeting structure is shown in Appendix 1 and its relationship with the ABS organisation structure is shown in Appendix 2. Details of the objectives, description and reports of the operations and performance of the ABS Program are shown in this chapter, and for the sub-programs and each component in Chapters 5 and 6.

While these chapters provide a detailed report of the performance of the ABS during 1986-87, it has not been possible in the time available to fully incorporate all aspects of program budgeting reporting in this issue.

ABS PROGRAM

Objective

To provide a high quality, user-oriented and dynamic statistical service for governments and the community to assist and encourage informed decision making, research and discussion.

Description

The principal legislation determining the functions and responsibilities of the Australian Bureau of Statistics is:

- *Australian Bureau of Statistics Act 1975*
- *Statistics (Arrangements with States) Act 1956*
- *Census and Statistics Act 1905*

The ABS is the central statistical authority for the Commonwealth Government and, under the Government-to-Government Arrangements entered into with the States pursuant to the *Statistics (Arrangements with States) Act 1956*, provides statistical services for the State governments. The functions of the ABS are defined in section 6 of the *Australian Bureau of Statistics Act 1975* as follows:

- ‘(a) to constitute the central statistical authority for the Australian Government and, by arrangements with the Governments of the States, provide statistical services for those Governments;
- (b) to collect, compile, analyse and disseminate statistics and related information;
- (c) to ensure co-ordination of the operations of official bodies in the collection, compilation and dissemination of statistics and related information, with particular regard to -
 - (i) the avoidance of duplication in the collection by official bodies of information for statistical purposes;
 - (ii) the attainment of compatibility between, and the integration of, statistics compiled by official bodies; and
 - (iii) the maximum possible utilization, for statistical purposes, of information, and means of collection of information, available to official bodies;
- (d) to formulate, and ensure compliance with, standards for the carrying out by official bodies of operations for statistical purposes;
- (e) to provide advice and assistance to official bodies in relation to statistics; and
- (f) to provide liaison between Australia, on the one hand, and other countries and international organisations, on the other hand, in relation to statistical matters.’

In order to provide official statistics, the ABS undertakes a large number of separate collections, ranging from periodic censuses of industry to regular surveys to provide current economic indicators, from household surveys on specific social or economic issues to the population census. In addition, the ABS devotes considerable efforts, in close co-operation with Commonwealth and State administrative agencies, to producing statistics as a by-product of administrative systems. Also, the ABS must keep in touch with users regarding their statistical requirements and with respondents to collections regarding their ability to provide data.

Each field of statistics is the responsibility of a subject matter unit and these units maintain ongoing contact with suppliers and users of data through a variety of means including standing committees, user groups, conferences and seminars of representative organisations, and through day-to-day contact in the course of collecting and disseminating data. ABS officers outposted to government departments and authorities also play an important part in these respects.

At the highest level, the Australian Statistics Advisory Council, which was established by the *Australian Bureau of Statistics Act 1975*, plays an active role in advising upon the direction and priorities of the ABS work program. The activities of the Advisory Council are described in its annual report to Parliament. The annual Conference of Statisticians, at which State governments are represented by a State official as well as by the Deputy Commonwealth Statistician in charge of each State

Office of the ABS, is another forum in which directions and priorities are examined, with particular reference to meeting State statistical needs. A statistical co-ordination and consultative mechanism also operates in each State and the Northern Territory.

As the national statistical organisation the ABS has a broad role, and every effort is made to meet the information requirements not only of Commonwealth, State and Territory governments but also of the community at large. In releasing statistics, the ABS follows the long established principle that data should be made available as soon as practicable and should be equally accessible to all users.

Many government programs depend directly on statistics produced by the ABS - both policy and operational decisions are based on ABS figures. Most of the major government programs are evaluated by means of official statistics - macro-economic and micro-economic change, and social and demographic change are all measured by the Bureau.

Statistical services to State governments

Under the Government-to-Government Arrangements entered into with the States pursuant to the *Statistics (Arrangements with States) Act 1956*, the ABS has a responsibility to State governments to provide certain statistical services specified in the separate arrangements, together with such other statistical services 'as may reasonably be required for the purposes of the State ...'.

These arrangements offer substantial advantages. They involve fewer requests for information from people and businesses than if the Commonwealth and States both ran extensive statistical collections. They require less staff and funding than the total that would be required by separate Commonwealth and State statistical offices. They ensure the use of a single Australia-wide set of definitions in ABS collections, with consequent advantages for businesses supplying data. They keep to the forefront the desirability of interstate comparability of statistics.

A major aspect of these arrangements is that the Commonwealth agreed to meet the costs of providing a statistical service to the States.

ABS financial and staffing resources

FINANCIAL RESOURCES, BY APPROPRIATION ITEM AND PROGRAM ELEMENT, 1986-87 AND 1987-88 ESTIMATES

	1986-87		1987-88 (Estimates)		
	Total Appropriation	Actual	Statistical Operations Sub- program	Corporate Services Sub- program	ABS Program
	\$'000	\$'000	\$'000	\$'000	\$'000
Running costs -					
Salaries	109 753	109 345	76 530	20 162	96 692
Administrative expenses	53 096	50 031	16 215	12 923	29 138
Compensation and legal expenses	1 370	1 370	-	1 162	1 162
Plant and equipment	4 493	4 493	4 782	-	4 782
Special appropriations -					
Australian Statistician	92	93	-	97	97
ASAC	17	16	-	19	19
<i>Total expenditure</i>	<i>168 821</i>	<i>(a)165 347</i>	<i>97 527</i>	<i>34 363</i>	<i>131 890</i>
Less revenue	960	933	3 700	-	3 700
<i>Total outlays</i>	<i>167 861</i>	<i>164 413</i>	<i>93 827</i>	<i>34 363</i>	<i>128 190</i>

(a) Includes expenditure of \$44.832m associated with the conduct of the 1986 Census of Population and Housing.

STAFFING RESOURCES AND OUTLAYS BY PROGRAM ELEMENT, 1986-87 AND 1987-88 ESTIMATES

Program element	1986-87 (Actual)		1987-88 (Estimates)	
	Outlays	Staff Years	Outlays	Staff Years
	\$'000		\$'000	
Statistical Operations Sub-program	(a)131 313	(b)3 968.4	93 827	2 983.9
Corporate Services Sub-program	33 101	(c)702.3	34 363	(c)735.6
<i>ABS Program</i>	<i>164 413</i>	<i>4 670.7</i>	<i>128 190</i>	<i>3 719.5</i>

(a) Includes expenditure of \$44.832m associated with the conduct of the 1986 Census of Population and Housing. (b) Includes 1015 staff years for the 1986 Census of Population and Housing. (c) Includes paid inoperatives.

By far the largest component of ABS program expenditure in 1986-87 was salaries. Other large items were expenditure on payments to field interviewers (agents) and on computing equipment and operating costs of the computers. The main receipts came from 'for sale' publications and increased revenue in 1987-88 will be generated from enhanced cost recovery on ABS publications. More details of expenditure and receipts are given in Appendix 3. An estimated distribution of expenditure across various ABS components is shown in Appendix 4.

Organisation

Besides the Central Office in Canberra the ABS has an office located in the capital city of each State and the Northern Territory. In Western Australia, South Australia and Tasmania the Deputy Commonwealth Statistician administering those offices is also the State Government Statistician.

The number and distribution of full-time operative staff by office over the last three years is shown in the following table.

DISTRIBUTION OF STAFF 1984-85, 1985-86 and 1986-87

<i>Office</i>	<i>Average operative staff levels (a)</i>		
	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>
Canberra	1 669	1 668	1 653
Sydney	493	529	524
Melbourne	442	428	436
Brisbane	321	319	328
Perth	216	229	237
Adelaide	219	217	226
Hobart	125	132	126
Darwin	30	36	38
<i>Sub-total</i>	<i>3 515</i>	<i>3 558</i>	<i>3 568</i>
1986 Population Census Data Transcription Centre - Sydney	..	..	1 015
<i>Total</i>	<i>3 515</i>	<i>3 558</i>	<i>4 583</i>

(a) Comprises full-time staff and part-time staff at full-time equivalent. Excludes inoperative staff, eg staff on approved leave for periods of twelve weeks or longer. Paid inoperative staff accounted for 88 staff years in 1986-87.

Details of staffing for 1986-87 by sub-program and component are given in Appendix 5. The top structure and senior staff of the ABS are shown in Appendix 2.

Management and planning

The diverse activities involved in providing official statistical services require a considerable management effort to marshal resources in an optimal fashion. In recent years the ABS became increasingly conscious of the impossibility of satisfying all demands, and also of the constraints of limits on public spending and the workload placed on respondents. Efforts to respond positively and responsibly to increasing demands, while staying within these constraints, led to a reshaping of management practices. What follows is an outline of the main features of the system of management of the ABS today.

From the mid-1970s onwards, an ABS program/project framework (corresponding to what are now called program budgeting 'components' and 'sub-components') has been overlaid onto the formal organisational structure and has formed the central basis of the ABS management and planning systems. This framework has facilitated a co-ordinated approach to the planning, disposition and use of staff and financial resources. ABS component/sub-component managers and leaders are identified in Central Office and in each State Office and, in essence, this program budgeting management structure, together with the normal hierarchical line management within each office, forms the basis of a formal matrix management system across all offices.

Within this framework, and within the context of the objectives and strategies identified in the ABS Corporate Plan, a rolling three-year forward work program is developed. Before provision is made for staffing levels in future years, all proposals for new or extended collections are analysed to ensure that appropriate account has been taken of resource demands on the service components whose contribution will be essential to successful completion of the proposal. Estimates are made of staffing requirements for proposals judged to be of high priority. Staff estimates for ongoing work and for projects already approved are reviewed and extended a further year ahead.

In order that feasibility studies or developmental activities are not commenced for proposals unlikely to be implemented, regard is had to the total resources likely to be available to the Bureau within the three year period and to the total demands on the service areas which the proposed forward work program would entail.

In drawing up the forward work program, judgments about relative priorities of ongoing and proposed collections are made in the light of continuing consultations with users of statistics. Broad objectives are established for each component and specific goals to be achieved over the three-year period are specified for each sub-component.

Proposals from ABS component managers are considered by senior management in the period June-September each year. The forward work program and estimates which emerge are then examined by the Advisory Council, reconsidered in the light of its advice and then submitted to the Minister. Staff and financial estimates are forwarded to the Department of Finance.

As decisions are made by the Government on staffing and finance, resources available for the first year of the forward work program become the basis for controlling and monitoring the use of resources in all offices of the Bureau. Staff and financial resources, particularly for travel, overtime and payments to field interviewers, are allocated at ABS sub-component level to each office. Responsibility for the use of these resources lies with the respective sub-component managers. The allocations are reviewed periodically during the year to take account of experience and any changes in circumstances that have occurred or are foreseen.

An integral factor in this whole process has been the series of reviews which has been proceeding since the mid-1970s. The purpose of the review program is to improve efficiency and effectiveness, and to identify resources which may be diverted to other higher priority work. For statistical areas, the reviews include both statistical aspects (eg the purpose of the statistics and their justification) and managerial aspects (eg can the purpose be accomplished more efficiently and economically?). The two aspects are, of course, complementary. Reviews of service activities give comparable attention to purpose, justification and managerial aspects.

Regular assessments are also made to ascertain whether the goals set down in the work program are being achieved. In addition, heads of Central Office Branches and of the State Offices report formally to senior management, on a rotation basis, on achievements against the agreed goals. In this way overall managerial effectiveness is monitored and senior staff both in Central Office and the State Offices have an opportunity to discuss problems with senior management of the ABS.

This management and planning system is further enhanced by periodic meetings of senior officers of the Bureau to consider general policy, statistical and administrative matters. One of the standing items on the agenda is the ABS work program, which is discussed in detail before presentation to the Advisory Council.

From time to time inter-office conferences are held of representatives of subject matter or service units, or those engaged on particular projects. The benefits in communication across a geographically dispersed organisation are significant.

Overlaid on these management practices are some special arrangements to ensure the successful redevelopment of computing systems. A standard systems development methodology has been adopted. All work is undertaken by multi-discipline project teams under the direction of line managers, aided by management and technical review committees. Periodic reports are furnished to senior management.

A Joint Management Review (JMR) of the top management role in State Offices of the ABS, and management services functions in all Offices, was conducted in 1984-85 by a team comprising two external management consultants and representatives of the ABS and the Public Service Board. The team made a large number of recommendations affecting ABS management practices and procedures and organisation structures. A summary of the main issues emerging from the JMR was given in the 1984-85 Annual Report at pages 6 and 7.

During 1986-87 a post-implementation evaluation report of the JMR was made by the external management consultants. The main conclusions of the consultants were that significant improvements have been made since the JMR and that the Bureau is now poised to provide better services to the Australian people. The consultants noted some disappointments, particularly in the development of internal management information systems, training and development initiatives and in the provision of national leadership by the central management services organisation. Action is being taken to address these matters.

5 STATISTICAL OPERATIONS SUB-PROGRAM

Objective

The objective of the Statistical Operations Sub-program is to contribute to the statistical goals of the Australian Bureau of Statistics by:

- *maintaining a balanced, timely, relevant statistical service;*
- *ensuring product quality;*
- *extending and improving the statistical service;*
- *promoting statistical standards, classifications and frameworks;*
- *co-ordinating the statistical activities of other government agencies;*
- *balancing benefits to users with public and private costs of collection; and*
- *being cost efficient and increasing productivity.*

Description

The sub-program operates in response to the statistical needs of governments and the wider community, taking into account the public and private costs associated with collecting, processing and disseminating statistical information. At the broad level, the activities undertaken within the Statistical Operations Sub-program include:

- the collection, processing, analysis and dissemination of statistics;
- the co-ordination of the statistical activities of other agencies (through co-ordination reviews, participation in national/State statistical committees and through the ABS's outposted statistical service);
- the provision of professional statistical support (outposted officers and consultancy work); and
- the development, maintenance and promotion of statistical standards, classifications and frameworks.

The work program of the Statistical Operations Sub-program is determined after extensive consultation with governments, businesses and community groups and with the advice of ASAC. In determining the work program, account is taken of the needs of users, the benefits of statistics, the load on respondents and the costs associated with the activities.

The Statistical Operations Sub-program depends on the Corporate Services Sub-program for personnel and resource management, executive management and some aspects of data processing facilities. Individual components within the sub-program have close links with a wide range of specific government programs which act as providers of data, users of statistical information and users of statistical co-ordination and consultancy services. Other agencies also co-operate with the Statistical Operations Sub-program in providing a total statistical service.

Outputs of the sub-program

Printed publications are the traditional media for release of official statistics. Once preliminary statistics have been published, more detailed data may be available to individual users on request, either immediately or when further processing of results has occurred.

In most fields, statistics more detailed than those included in publications are available and can be obtained by the public by approaching the ABS through its Central Information Service. This service provides a contact point for general enquiries about the availability of statistics or dissemination services.

The ABS exploits all major avenues for the dissemination of statistics and also releases data via microfiche, computer-readable media and, more recently, on-line electronic access. This latter form of access takes advantage of technological developments in the telecommunications field and of particular interest is the use of VIATEL, the national videotex service, the installation of a time series data base called AUSSTATS on the CSIRONET public access computer network, to provide an on-line data service which is updated daily, and the use of electronic mail services to deliver previously requested data to specific users.

However, even with an array of measures such as these the ABS cannot in practice meet the needs of all users of statistics directly. Various information intermediaries therefore play an important role in disseminating statistics. These include all branches of the media, libraries (general and specialised), commercial information networks, and business, academic and other research services. Recognising this fact, the ABS has taken positive steps to facilitate the provision of services by such organisations.

Performance of the sub-program

The ABS is developing performance indicators for this sub-program. In future annual reports it is expected that the performance of this sub-program will be assessed against the following performance indicators:

Publications

- Number of publications issued (by State and frequency).
- Expenditure on printing of publications compared with revenue.

- Number of clients on ABS mailing list.
- Number of publications distributed.
- Comments on improvement to publications (in terms of presentation and timeliness).
- Comments on improvements in efficiency of producing publications.
- Number and subject matter of new publications.

Inquiry services

- Number of inquiries (telephone, over counter, mail).
- Use of VIATEL.
- Use of AUSSTATS.
- Use of TELESTATS.

Co-ordination

- Number of joint reviews undertaken for co-ordination of statistical activities of government agencies.
- Number of staff years of outposting to government agencies.

Consultancy

- Number of consultancy requests serviced.
- Number of staff years of consultancy work performed.

Quality of output and service

- Achievement of target release dates for major economic indicators.
- Results of reviews of particular statistical collections.

Respondent load

- Number of complaints about respondent load.
- Steps taken to reduce respondent load.

New initiatives, research and analysis

- Details of new initiatives.

- Number of professional papers presented by ABS staff.

Gaps in the total statistical program

- Statement of major requirements omitted from forward work program.

The remainder of this chapter reviews the activities and achievements of each component of this sub-program during 1986-87.

Information services

The ABS disseminates statistics in a variety of forms including printed publications, computer printout, microfiche, computer-readable media such as magnetic tapes and floppy disks, and by means of on-line electronic access. In addition, the ABS's inquiry services are used extensively and information intermediaries in various fields also play an important role in the overall dissemination of ABS data. A special article entitled *Dissemination of Statistics by the ABS* was included in the ABS Annual Report for 1985-86. It discussed the broad strategy underlying ABS data dissemination and provided considerable detail about the major dissemination vehicles in use and under development.

Publications range in size from a few pages containing monthly or quarterly key indicator series to major volumes such as the Australian and State Year Books. All publications are listed and described in the annual *ABS Catalogue of Publications* (ABS Catalogue No. 1101.0).

PUBLICATIONS ISSUED DURING 1986-87

	Number of Titles									Number of Issues
	Can- berra	NSW	Vic	Qld	WA	SA	Tas	NT	Total	
Annual	103	30	22	42	23	28	26	3	277	344
Quarterly	50	4	4	7	4	4	5	3	81	291
Monthly	49	6	7	8	7	3	7	1	88	954
Other	54	3	3	6	2	3	2	3	76	81
Total	256	43	36	63	36	38	40	10	522	1 670

Approximately 46 000 users are on the ABS's mailing list to receive publications on a regular basis. Of these, 60 per cent are in the business sector, 18 per cent in Commonwealth, State and local government, and 7 per cent in educational institutions, leaving 15 per cent in other categories.

Proceeds from sales of Bureau publications in 1986-87 were \$483 500. In addition, the Australian Government Publishing Service gained revenue of \$180 000 from the sale of 10 ABS publications which it handled in that year. In order to recover more of the costs of providing statistical services, the ABS will be introducing charging for all its statistical publications (previously, there was only a charge for publications of 25 pages or more) and introducing market-based pricing for other statistical services

such as data on magnetic tape, floppy disks and microfiche, on-line data services and other special data services. As well as increasing revenue, the charges will provide a rationing mechanism for demands on ABS goods and services.

Free copies of publications will still be provided to public libraries, deposit university libraries, parliamentarians and the media.

As an economy measure, production of the 1987 Australian and State Year Books has been suspended. However, special bicentennial issues of Year Book Australia and Year Book New South Wales are planned for 1988. The former will contain a special article on the history of official statistics of the Colonies, States and the Commonwealth as well as a number of other special features. The latter will include a series comprising about 150 pages of illustrations to depict some 24 themes in the development of the State during the past 200 years. Year Books will also be produced for the other States in 1988.

During 1986-87 the ABS's Central Information Service handled about 311 900 inquiries Australia-wide. Of these 72.6 per cent were received by telephone, 23.9 per cent by personal visit and the rest by mail. Of the total inquiries 75.6 per cent were relatively straightforward, requiring (for example) the provision of a publication or a few readily available figures. The other 24.4 per cent involved a more detailed response such as arranging for a special extraction of data, co-ordinating a response crossing a range of statistical fields, or arranging a subscription to ABS publications or other customised data services. The number of inquiries received by the service has been increasing steadily each year and further increases are occurring as results from the 1986 Census of Population and Housing are progressively released.

About 265 000 copies of microfiche were dispatched on a regular basis during the year to about 2 000 clients on the Bureau's mailing list.

A telephone recorded message service - 'Dial-a-statistic' - is provided from the larger ABS Offices. In the Sydney, Melbourne, Brisbane and Adelaide Offices the message covers a small number of the most frequently sought series, including the Consumer Price Index (CPI). In Canberra the message features the CPI and also provides information about forthcoming data release dates. Australia-wide, the service received 33 000 calls in 1986-87.

With advances in telecommunications networks and increasing community access to computing facilities, there has been increasing demand to provide access to statistics in forms which make the data amenable to access, storage, and manipulation by computer. Growing numbers of users require immediate access to newly-released statistics and the freedom to transfer and manipulate data from large databases on demand. Some present and likely future developments in the use of electronic media are reviewed briefly below.

Viatel

On 15 April 1986 the ABS began to provide information on VIATEL, the national videotex service. The ABS service has the following components:

- Current economic, social and population statistics (140 frames) updated at the time the corresponding publications are released.
- Indexes to enable users to readily locate information (90 frames).
- Service information (addresses, telephone numbers etc for each of the eight ABS Offices - 20 frames).
- Release dates of forthcoming publications (15 frames).
- A messaging service which allows subscribers to make inquiries electronically; also to provide comments and to suggest additional information for inclusion in the service.

Use of the service has exceeded expectations, with the number of accesses to individual frames of information, including index frames, averaging over 6 500 per week. As well as meeting the particular needs of users requiring instant access to main statistics immediately upon release, dissemination by this means has effectively complemented the existing range of ABS services. Plans are currently being developed to extend the service through the provision of sub-databases containing sets of material relating to each of the States and Territories.

Ausstats on-line data service

This service, which was introduced in June 1986, continues to attract a growing number of customers. The service comprises a time series database and supporting software for storing, retrieving and manipulating time series data. The service has the following features:

- The database is updated daily at the time statistics are released. Series cover the full time span of available data (up to 30 years in some cases).
- Users may access the database through a permanent link to CSIRONET, by a dial-up connection using the telephone network or via 'gateways' from other Australian or international networks.
- Users may transfer data from AUSSTATS to their own computer systems.
- Charges depend on resources consumed in using the facility and are intended to cover CSIRONET charges and ABS costs related directly to the maintenance of the service. All users of the system are charged.

The database for the service presently comprises over 4 000 series, most of which are drawn from publications, although they cover a longer time span than the published data. However, AUSSTATS has the potential to provide ready access to a far wider range of data than it is practicable to provide in hard-copy form and work has commenced on the task of progressively expanding the database content to 40 000 general interest series over the next twelve months. In addition, series which are of interest to specific customers can be provided for their exclusive use over an agreed period. This latter service is provided on a full cost recovery basis. The possibility of other Government departments utilising AUSSTATS for the dissemination of their own data is being considered.

Telestats electronic mail service

The ABS launched its TELESTATS service in September 1986. This service uses Telecom's Telememo electronic mail system to automatically deliver previously requested, tailored information to subscribers' electronic mail boxes. Currently, the information provided is drawn from the ABS's database of monthly foreign trade statistics. Subscribers may request, for example, monthly returns showing trade in a customer-specified range of commodities.

The TELESTATS service will be progressively extended to provide a more broadly-based statistical dissemination medium covering a wide range of subject fields. Ultimately, it is planned that all material (ie both text and tables) published in hard-copy form will also be made available electronically through TELESTATS. The service has already proved to be a valuable supplement to the VIATEL and AUSSTATS services.

Magnetic tape services

A growing volume of data has been made available on magnetic tape in recent years. Currently the ABS has 20 standard tape releases, not including data made available on tape on an ad hoc basis. The standard releases are described in Part B of the ABS's *Catalogue of Publications* (ABS Catalogue No. 1101.0).

Recent additions to these services include unidentifiable sample unit record data from several household surveys. Each tape is accompanied by documentation containing the technical and other information needed to enable it to be used effectively.

Data for use on personal computers

As already indicated, the facility to transfer data to personal computers has been incorporated in the AUSSTATS service. The ABS has also developed systems for providing certain data on floppy disk in formats which can be read by the majority of personal computer systems. Initial floppy disk services were made available to the public during 1986-87. The ABS is also looking at making 1986 Population Census data available on CD-ROM (Compact Disk - Read Only Memory).

National accounts

The system of national accounts presents, in a systematic and comprehensive way, summaries of economic transactions that take place in the Australian economy and between Australia and the rest of the world. The usefulness of the accounts derives largely from the way in which data are brought together from virtually all available sources and presented as far as possible in a conceptually consistent way both for a given period and over time. The accounts are basically in accordance with the United Nations System of National Accounts.

To present a current picture of the national economy, summary national income and expenditure accounts are published as soon as possible after the end of each quarter, in terms of both current and constant prices. However, much of the more reliable information needed for the accounts does not become available until long after the publication of preliminary figures. Estimates for the most recent quarters are therefore based on limited data and successive revisions are necessary as additional information becomes available.

A more detailed and more firmly based picture of the national economy is provided by various annual publications such as the input-output tables, estimates of gross product by industry and the annual national income and expenditure publication.

Activities and achievements during the year included:

- Introduction of two new annual publications: *Australian National Accounts, Estimates of Capital Stock, 1985-86* (ABS Catalogue No. 5221.0), published in May 1987 and *Australian National Accounts, State Accounts, 1985-86* (ABS Catalogue No. 5220.0), published in June 1987. These publications extend the range of national accounting data available in two areas of particular interest to users.
- Incorporation of three significant conceptual changes within the national income and expenditure publications released during 1987:
 - (i) the introduction of current cost estimates of depreciation,
 - (ii) reclassification of transactions involving finance leases to accord with the Australian Accounting Standard 17 'Accounting for Leases' issued by the Institute of Chartered Accountants and the Australian Society of Accountants, and
 - (iii) reclassification of repair and maintenance expenditure on roads from 'capital expenditure' to 'government final consumption expenditure'.

Further explanation of these changes may be found in the explanatory notes to the annual national income and expenditure publication (ABS Catalogue No. 5204.0).

- Publication, for the first time, of quarterly wages, salaries and supplements estimates for each State and Territory in the March quarter 1987 edition of *Quarterly Estimates of National Income and Expenditure, Australia* (ABS Catalogue No. 5206.0).
- Publication of constant price national accounts estimates at average 1979-80 prices extending back to September quarter 1959 (quarterly data) and 1948-49 (annual data). The estimates prior to 1969-70 were derived by 'splicing' estimates at average 1979-80 prices to estimates relating to earlier base years.
- Publication in May 1987 of input-output tables for 1979-80 and 1980-81. These were the first tables produced using a new processing system.

International accounts

The international accounts component produces statistics on the balance of payments, foreign investment, and foreign ownership and control.

Activities and achievements during the year included:

- Introduction into the quarterly balance of payments publication *Balance of Payments, Australia* (ABS Catalogue No. 5302.0) of constant price data, together with associated implicit price deflators and terms of trade data. A greater range of analytical commentary was also included. These changes commenced with the September quarter 1986 issue.
- Release of detailed regional balance of payments data in a new publication *Balance of Payments, Australia - Regional Detail on Microfiche, 1984-85* (ABS Catalogue No. 5338.0) issued in May 1987.
- Completion of a new computer processing system for the storage, compilation and publication of balance of payments statistics.
- Redesign of the annual foreign investment publications *Foreign Investment, Australia, Preliminary* (ABS Catalogue No. 5304.0) and *Foreign Investment, Australia* (ABS Catalogue No. 5305.0) to provide more comprehensive statistics on foreign investment in Australia and Australian investment abroad. This task was part of the continuing work on the implementation of the recommendations contained in the document *A Framework for Foreign Investment Statistics*, available on request from the ABS.
- Introduction of revised collection forms for banks in the surveys of foreign investment and the collection, for the first time, of data on foreign investment in Australian shares on a market value basis. Improved foreign investment statistics arising from these changes will be included in publications from early 1987-88. These developments also form part of the implementation of the recommendations of the *Framework*.

- Improvements in the methodology used to produce foreign investment statistics, resulting in better quality data and reduced response burden. Changes introduced include the use of new quarterly data on income earned on securities issued in Australia to improve quarterly investment income estimates; a reduction in the size of the quarterly survey of foreign investment in Australia from 1 900 to 1 500 enterprise groups; a reduction in the detail collected from certain categories of enterprises responding in annual surveys; and the development of new sources for identifying enterprises undertaking foreign investment activity.
- Publication of 1983-84 foreign ownership and control statistics for the transportation industry; 1984-85 statistics for the mining industry, the construction industry, and for mineral exploration activity (foreign control only); and 1986 statistics for the banking industry. (Relevant publications are ABS Catalogue Nos. 5335.0, 5317.0, 5343.0, 5323.0 and 5347.0.)

Trade

The trade component covers statistics of exports, imports, imports cleared for home consumption, shipping, excise and interstate trade. In addition to monthly, quarterly and annual foreign trade publications, many microfiche tabulations are produced and a large number of users subscribe to a special returns service which provides them with regular monthly or quarterly information on individual commodities.

Activities and achievements during the year included:

- Continuation of work associated with the adoption in Australia of a new international convention, entitled the Harmonized Commodity Description and Coding System, which will be used for the collection and presentation of detailed import and export statistics from 1 January 1988.
- Liaison with the Australian Customs Service concerning development of an electronic system for export administration which is expected to lead to improvements in the accuracy and timeliness of export statistics.
- Continuation of work on the rationalisation of the collection of shipping statistics, including preparation for the phased introduction of a new administrative by-product collection from port authorities to partly replace an existing collection from shipping companies and so achieve some reduction in the statistical reporting workload borne by them.
- As a result of the continuation of a review of interstate trade statistics this collection will not be extended to a national basis nor to cover New South Wales and Victoria. Rationalisation and improvement of the collection is proceeding in respect of data for the other States.
- Implementation of changes to monthly, quarterly and annual trade publications to achieve rationalisation, and improved production efficiency and timeliness.

- Introduction of TELESTATS, an electronic mail service for delivery of special returns which provide foreign trade statistics with content and format tailored to users' requirements. This new facility uses Telecom's Telememo system and permits users to access trade statistics directly via their microcomputers.

Prices

In addition to the Consumer Price Index (CPI), the prices component undertakes the compilation of price indexes relating to imports and exports, inputs and outputs of manufacturing industry, and materials used in the building industry.

Activities and achievements during the year included:

- Completion of work on reviewing the composition and weighting of the CPI. The review took longer than expected because of difficulties in resolving the complex issue of the future treatment of home ownership costs in the CPI. The outcome was that prices of houses are no longer represented directly in the CPI but housing mortgage interest charges are now included. Consumer credit charges are also now included. The new treatment of home ownership costs and interest charges in the CPI is explained in a special ABS Information Paper, *The Australian Consumer Price Index, Treatment of Home Ownership Costs* (ABS Catalogue No. 6441.0) issued on 26 February 1987. The review made extensive use of information on expenditure patterns revealed by results from the 1984 Household Expenditure Survey in determining new weights for items included in the list of goods and services priced for the CPI (ie the CPI 'basket').
- Completion of the review and reweighting of the price index of materials used in house building. The review removed obsolete materials, incorporated new materials used in present-day house construction, and adopted new weights to reflect the relative importance of the materials currently used in the construction of houses.
- Commencement of work to extend the price index of materials used in house building to include Canberra and Darwin, and the price index of materials used in building other than house building to include Canberra (Darwin is already included). This work is scheduled for completion early in 1988.
- Continuation of the development of a new computer processing system to be used in producing all the price indexes relating to imports, exports and the manufacturing and building industries. The first stage of the system was brought into production in November 1986 and the whole of the new system is expected to be operating by mid-1988.

Financial institutions

The financial institutions component collects data on the lending activity and financial structure of banks, building societies, credit unions, finance companies, cash management trusts and superannuation funds. Several of the supporting collections are undertaken in co-operation with authorities such as the Reserve Bank of Australia and State registrars of building societies and credit unions.

Activities and achievements during the year included:

- Completion of a review of user requirements for financial corporation statistics and lending activity statistics. In addition to identifying new user requirements the review confirmed the potential for electronic dissemination of these statistics.
- Publication of preliminary results from the 1984-85 re-designed superannuation funds collection, covering self-administered funds in both the public and private sectors, in *Superannuation Funds, Australia, 1984-85, Preliminary* (ABS Catalogue No. 5652.0).
- Commencement of a feasibility study into the compilation of quarterly flow of funds and sector balance sheet statistics to supplement the national income and expenditure statistics. An expert in these fields from Statistics Canada has been engaged to undertake the study, the results of which are expected to become available early in 1989.

Public finance

The major objective of the public finance component is to provide statistical information on revenue, outlay and financing transactions of Commonwealth, State, Territory and local governments and their trading enterprises.

In addition to a range of annual publications, quarterly statistics are compiled for inclusion in the national accounts, and detailed financial statistics about individual local government authorities are provided on magnetic tape and microfiche.

Activities and achievements during the year included:

- Investigation into the demand for statistics on the gross and net indebtedness of the public sector and into sources of data from which these statistics could be derived.
- Revision of public finance statistics to incorporate the treatment of finance leases applicable under Australian Accounting Standard 17 'Accounting for Leases' issued by the Institute of Chartered Accountants and the Australian Society of Accountants.

- Introduction of a new statistical treatment for expenditure on roads. All such expenditure was previously classified to capital expenditure but under the new treatment, expenditure on the construction of new roads is classified as capital expenditure, and road maintenance costs as current expenditure.

Agriculture

The agriculture component has as its aim the provision of a balanced range of commodity and financial statistics. The main elements of this component are an annual agricultural commodity census, a number of commodity surveys, an agricultural finance survey and the production of a range of derived statistics, including the value of agricultural commodities produced and the apparent consumption of foodstuffs and nutrients.

Activities and achievements during the year included:

- A major review of the annual agricultural commodity census resulting in a decision to reduce its scope without significantly affecting the ability to provide comprehensive statistics for the agricultural sector. This change in strategy will enable the agricultural finance survey to be re-introduced without the need to increase total staff resources for the agriculture component. The census now only includes agricultural establishments with an estimated value of agricultural operations of \$20 000 or more. Previously this cut-off was \$2 500. As a result, some 25 per cent of the smaller farmers will be relieved of the need to supply detailed data each year.
- The re-introduction of the agricultural finance survey (AFS) on an annual basis from 1986-87 onwards; this is the first such survey since that for 1980-81. Strategies to eliminate duplication between the AFS and farm surveys undertaken by the Bureau of Agricultural Economics will be followed in the conduct of the AFS for 1986-87. This will involve closer co-operation between the two Bureaux, by eliminating overlap of their respective samples and, where practicable, by sharing data.

Mining

The main element in this component is an annual census of the mining industry, conducted with the co-operation and assistance of State government mines departments. The census provides data on the structure and operations of the industry, comparable with those available in respect of manufacturing industry. The program also includes quarterly and annual collections of mineral exploration undertaken.

Activities and achievements during the year included:

- Continuation of a comprehensive review of the mining component with a view to achieving a realistic balance between users' needs, respondent load and available resources. It is now clear that completion of this review will take considerably more time than was at first anticipated.
- Commencement of a review of the collection strategy used to obtain quarterly mineral exploration statistics.

Energy

This component produces statistics on energy and its usage in both the household and industrial sectors.

Activities and achievements during the year included:

- Publication of the first results from the 1985-86 Household Energy Survey. These provide an up-to-date picture of selected characteristics of dwellings and households, their holdings and usage of energy-consuming appliances, and household consumption of reticulated energy. (*National Energy Survey - Household Appliances, Facilities and Insulation, Australia, 1985-86* - ABS Catalogue No. 8212.0).
- Further investigation and pilot testing of a proposed survey of energy use by industry in respect of 1986-87. The survey aims to provide those responsible for energy policy, planning and supply with a comprehensive picture of the type of energy being used for main purposes by various sectors of industry.
- Assistance to electricity supply authorities in New South Wales and Western Australia to industry-code non-domestic customers (using the ABS's Australian Standard Industrial Classification), thus providing an ability to compile information about the consumption of electricity by particular industries.

Manufacturing

The manufacturing component includes censuses of manufacturing and electricity and gas production and distribution, and monthly and quarterly surveys of manufacturing production. The censuses are normally conducted annually. However, as a consequence of reductions made to ABS resources as part of the 1986-87 Budget, the 1985-86 censuses were cancelled.

Activities and achievements during the year included:

- Further development and implementation of a computer-based processing system for the monthly and quarterly surveys of manufacturing production.

- Development of a new publication on Australian manufacturing, *Australian Manufacturing, Selected Statistics, No. 1* (ABS Catalogue No. 8216.0), which presents statistics on the manufacturing sector available from various ABS collections. The objective in compiling and publishing the initial edition of the publication is principally to provide users with information on the manufacturing sector for 1985-86 in the absence of detailed sector statistics following cancellation of the 1985-86 census. The ABS proposes to publish further editions of the bulletin, the frequency of which will be determined following an assessment of the user community's response to the initial bulletin.
- Development of plans for re-introduction of the manufacturing census for 1986-87 incorporating reductions in reporting workloads for a majority of manufacturers.

Distribution and services industries

This component includes monthly and quarterly surveys of retail sales, and periodic censuses or surveys of retail, wholesale and selected services industries.

Activities and achievements during the year included:

- Conduct of the 1985-86 Retail Census. This involved collection of information from all retailers in Australia. For the first time in a retail census, only a sample of retailers was required to provide the more detailed statistics, while the remaining retailers were asked to report only a limited range of information. These procedures reduced both the overall cost of conducting the census and the form-filling workload for most small retailers. The census results will be provided in a series of publications during 1987-88.
- Development of questionnaires and operating procedures for a survey of major tourism and personal services industries in respect of 1986-87. The survey has been developed in accordance with the needs and priorities of relevant Commonwealth and State agencies and with private sector industry associations. The development of a second survey, concentrating on business and technical services industries, commenced during the year. It is proposed to conduct this survey in respect of 1987-88.

Construction

The main sub-components in the construction component are monthly statistics of building approvals and dwelling commencements as reported by local government and other approving authorities, quarterly surveys of building activity and of engineering construction activity, and a periodic survey of the construction industry.

Activities and achievements during the year included:

- Implementation from the September quarter 1986 of the new engineering construction survey, to replace the quarterly construction other than building survey. Results from the new survey provide for the first time a measure of all private and public engineering construction being undertaken in the economy.
- Publication of the 1984-85 Construction Industry Survey (CIS) results which present both structural and commodity statistics for the public and private sectors. A number of CIS evaluation studies, including reviews of coverage strategy and the value of CIS output to users, were also undertaken during the year.
- Publication for the first time of constant price building approvals data.

Transport and tourism

The transport sub-component covers the collection and dissemination of monthly statistics on new motor vehicle registrations and road traffic accidents involving fatalities; quarterly statistics on road traffic accidents and interstate road freight movements, annual statistics on the rail transport industry; a triennial survey of motor vehicle use and an associated motor vehicle census; and a periodic survey of the transport industry.

Activities and achievements during the year included:

- Completion of the dissemination of statistics from the 1985 Survey of Motor Vehicle Use and associated motor vehicle census, in the form of publications, microfiche, and special tabulations requested by a wide range of users of the data. (Relevant publications are ABS Catalogue Nos. 9208.0, 9215.0, 9309.0, and 9310.0.)
- Completion of the publication and dissemination of statistics from the 1983-84 Transport Industry Survey and associated business vehicle survey. (Relevant publications are ABS Catalogue Nos. 9103.0, 9104.0, 9105.0 and 9107.0.)
- Commencement of a review of the needs and priorities of users of statistics from the survey of motor vehicle use and the transport industry survey as a basis for determining future ABS activity in the statistical areas covered by these surveys.

The tourism sub-component includes a quarterly survey of tourist accommodation activity and other periodic surveys.

Activities and achievements during the year included:

- The collection and publication, commencing with data for the September quarter 1986, of statistics on long-term caravan parks and on hotel and motel guest arrivals, and the introduction of a 'star' grading classification for hotels and motels (*Tourist Accommodation, Australia, September Quarter 1986* - ABS

Catalogue No. 8635.0). The production of these additional statistics from the quarterly survey of tourist accommodation follows recommendations contained in a 1985 report by the (then) Department of Sport, Recreation and Tourism on the needs of users of tourism statistics in both the public and private sectors.

- Investigation into the feasibility of expanding the scope of tourist accommodation statistics to include holiday flats and units, with effect from the September quarter 1987. This development follows from another recommendation of the 1985 report, in recognition of the growth in this type of tourist accommodation.

Business surveys

This component includes quarterly surveys of actual and expected new capital expenditure by private sector businesses, stocks, actual and expected manufacturers' sales and company profits. These represent some of the principal quarterly indicators of economic activity in Australia and are prime data sources for the quarterly national accounts. The component is also responsible for the production of enterprise statistics from ABS annual and periodic economic collections, the conduct of ad hoc surveys to measure economic transactions not covered elsewhere and for the production of data on environmental issues.

Activities and achievements during the year included:

- Release of the first quarterly publication on company profits, *Company Profits, Australia* (ABS Catalogue No. 5651.0) (September quarter 1986).
- Enhancement of the stocks and actual and expected manufacturers' sales series, including an improved industry breakdown of these data. This has resulted from the allocation of stocks and sales information reported by large manufacturers engaged in more than one industry to individual industry categories rather than allocating their total stocks and sales only to the industry in which each manufacturer is primarily engaged.
- Collection of data on the value of new assets acquired by businesses under finance lease arrangements. This will facilitate the linking of a new capital expenditure series on an 'effective ownership' basis with the existing series which is on a 'legal ownership' basis. The new series is expected to be published in late 1987.
- Improvements in the presentation of results from the quarterly survey of new capital expenditure. In particular, the presentation of expected capital expenditure statistics has been enhanced by providing projections adjusted in accordance with actual realisation rates for expected new capital expenditure derived from information reported in earlier periods of the time series.
- Implementation of a new computer processing system for the quarterly economic indicator surveys conducted by the component.

- Publication of results from an ABS household-based survey on environmental issues and usage of national parks in *Environmental Issues and Usage of National Parks, Australia, April 1986* (ABS Catalogue No. 4115.0).

Science and technology

The science and technology component is responsible for the compilation and dissemination of statistics on research and experimental development (R & D). R & D data are collected from business enterprises and general government, private non-profit and higher education organisations. The all-sector aggregates which result from the R & D survey form the only comprehensive data on Australia's R & D effort.

Activities and achievements during the year included:

- Release of results from the 1984-85 R & D Survey in both preliminary and final publications. (Relevant publications are ABS Catalogue Nos. 8104.0, 8109.0, 8111.0 and 8112.0.)
- Release of results in June 1987 from the smaller-scale 1985-86 Inter-Year Estimates (IYE) R & D Survey, which covered all sectors, in *Research and Experimental Development: All-Sector Summary (Inter-Year Survey), Australia, 1985-86* (ABS Catalogue No. 8122.0).

The next full R & D survey is being conducted in respect of reference year 1986-87, and the next IYE R & D survey will be conducted in respect of 1987-88.

- Publication of results from a survey conducted in South Australia on the computing needs of small businesses in *Computing Needs of Small Businesses, South Australia* (ABS Catalogue No. 8101.4).

The component also has a monitoring and co-ordination role in the areas of science and technology statistics. Internationally the ABS has played a leading role in the development of Information, Communication and Computer Program (ICCP) statistics within the OECD. These statistics are being developed to provide measures of the impact, both economic and social, of the rapid advances in technology, particularly in the areas of telecommunications and micro-electronics, which are taking place at present in OECD member countries.

Integration, classification and development

The integration and development sub-components of this component provide a service to other statistical components by establishing and maintaining standard concepts and definitions for structural data items and units, and by providing training, co-ordination and research services in relation to the development and conduct of the ABS's integrated economic censuses and surveys.

Activities and achievements during the year included:

- Continuation of research to maintain, review and update the standard definitions relating to the treatment of business units for statistical purposes, to provide for changes in business practice, and for the progressive extension of economic censuses and surveys into new fields. Research has concentrated on issues related to the tourism and personal services industries - in preparation for the forthcoming survey of these industries - and large and complex company groups.
- Continuation of a program of staff training in the basic elements of integrated economic statistics, which are fundamental to all ABS economic data collections.

The classification sub-component is responsible for the development and maintenance of statistical classifications used by the ABS and other government agencies. Classifications, together with other conceptual standards, define and present in logical structures the data items (such as commodities) and the broader economic and other categories (such as industries, institutional sectors and geographical areas) in respect of which statistics can be collected, compiled and published. Classifications are thus a major determinant of the usefulness of statistical output.

Activities and achievements during the year included:

- Continued review and updating of the 1983 edition of the Australian Standard Industrial Classification (ASIC) with the objective of implementing a revised ASIC in 1989.
- Commencement of work on the 1986-87 edition of the Australian Standard Commodity Classification. (ASCC). This classification enables comparable commodity statistics of imports, exports and domestic production to be compiled, and serves as a framework for improving comparability between commodity items in ABS statistical series.
- Commencement of work to extend the ASCC to cover services.
- Publication of a completely revised Australian Pack Classification (*Australian Pack Classification* - ABS Catalogue No. 1210.0).
- Publication of the third edition of the *Australian Standard Geographical Classification* (ABS Catalogue No. 1216.0).
- Continued development of the Geographical Classification Framework.
- Continued participation in the review by the United Nations Statistical Office of the International Standard Industrial Classification and related classifications.

Economic censuses system

This component provides a variety of services to other statistical components involved in conducting the ABS's integrated economic censuses and surveys. These services include the extraction of economic census and survey populations from the ABS register of businesses, the dispatch and collection of forms and the development and maintenance of the computer processing system for these collections.

Activities and achievements during the year included:

- Dispatch, collection and processing of the 1985-86 Retail Census forms. This is the largest economic collection conducted by the ABS and for 1985-86 a new collection strategy was used to reduce respondent load.
- Development of the computer processing system for the 1986-87 collections in the mining, manufacturing and services industries sectors and for an economy-wide energy usage survey also to be conducted for the reference year 1986-87.
- Investigations into the use of laser printing technology to produce 'tailored' ABS manufacturing census collection forms and the requirements for mail handling equipment and services within the ABS.

Population census

This component develops and conducts censuses of population and housing. A population census is required, by legislation, to be conducted every five years. The results are used to revise population estimates and to provide detailed statistics on the population and its housing.

Following the successful conduct of the eleventh national census of population and housing on 30 June 1986, completed census forms were transferred to a specially equipped data transcription centre in Sydney for processing. In the centre responses to questions on the census forms were coded, the statistical information (but not names and addresses) entered into the computer and automatic checks conducted to detect and amend inconsistencies in responses and errors in processing. Up to 1 200 persons were employed during the peak data coding and transcription periods. The conduct of the census and the processing of the forms were completed to schedule and within budget.

As a result of a reduction in the ABS's overall budget, and in contrast to recent censuses, no preliminary processing of 1986 Census forms was undertaken. This has meant a delay in the revision of June 1986 State population estimates, on the basis of the 1986 Census counts, until September 1987 and in revision of population estimates for local government authority areas until the end of 1987.

Statistics produced from the census are being released progressively, commencing with results for the smaller States and Territories. First results from the census were released on 9 April 1987. Since then, other information in increasing detail and geographic coverage has become available.

As for previous censuses, output from the 1986 Census will be released for a wide range of geographic areas and will be available in various forms: magnetic tape; microfiche; printed reports; and statistical and analytical publications. For the first time census statistics for specified areas will be provided on floppy disk for use on microcomputers, and the possibility of releasing an extensive range of data on CD-ROM (ie data stored on compact disk in read-only format) is being explored. These new methods of releasing data will increase user access to census statistics - particularly access by local government authorities, whose use of microcomputing facilities is increasing rapidly.

A one per cent sample of unidentifiable unit records relating to persons, families and households is again to be made available for use by researchers. This will enable them to manipulate census data to meet their specific requirements.

The 1986 Census data are supported by an extensive array of information papers and maps; of particular note are the collection district outline maps and the comprehensive census dictionary which provides definitions of concepts and terminology used in the census.

Compared with the 1981 Census, more comprehensive 1986 statistics will be available on families, language, ethnic background and education. With the adoption of the Australian Standard Classification of Occupations, improvements will also be evident in statistics relating to the occupation of the workforce. Most census output will continue to be based on the actual location of the population on census night but, compared with the 1981 Census, there will be a greater range of statistics available on the basis of the place of usual residence of the population.

In February 1987 the eleventh Asian and Pacific Population Census Conference was jointly hosted in Sydney and Canberra by the ABS and the Conference's sponsor, the East-West Center, Hawaii. The Conference is an important forum for the exchange of information on the development of methods and technology employed in census operations and the eleventh session was attended by representatives from 19 countries and three international agencies.

During the year, investigations into alternative methods of collecting and processing census data were commenced with the aim of making future census operations more cost-effective. In particular, the results of tests conducted in 1987 will help to determine whether respondent-marked forms suitable for processing using optical mark recognition technology should be adopted for the next census.

Demography

This component produces statistics on births, deaths, marriages, divorces, overseas arrivals and departures, and internal migration on a regular basis. Estimates are made of the age, sex, birthplace and geographical distribution of the population. Forward

projections of the population according to specified demographic assumptions are published on a regular basis. The demography component also provides advice and assistance to other government agencies concerning the use of ABS population projections and in producing their own projections using different sets of demographic assumptions.

Activities and achievements during the year included:

- Completion of development of the methodology to be used for the production of annual small area population estimates by age and sex. The first estimates for these new series will refer to June 1987 and will be released in early 1988.
- Completion of development of the methodology to be used for the annual estimation of marital status of the population by age and sex. The first estimates for this new series will refer to 30 June 1986 and will also be released in early 1988.
- Publication of a bulletin, *Australian Demographic Trends, 1986* (ABS Catalogue No. 3102.0), which provides a comprehensive statistical overview of the demographic trends evident in shaping Australia's population growth.
- Conduct of a survey on family formation in September 1986. This survey provided information on the pattern of family formation, including marriage history and birth expectations, which will be used in the compilation of population projections.
- Detailed analysis of recent mortality, fertility and migration trends for the formulation of assumptions for population projections to be issued in 1987-88 based on the results of the 1986 Census of Population and Housing.
- Development of an additional source of data for use in preparing internal migration estimates by accessing (unidentified) information held on the Medicare register.

Labour

The labour component provides statistical information on the composition and characteristics of the labour force, the operations of the labour market and conditions of employment.

The ABS's monthly population survey provides timely estimates of employment and unemployment derived from a sample of households across the whole of Australia. It collects basic demographic data to enable various characteristics of the employed and unemployed to be analysed. In addition, in most months of the year, supplementary surveys are run in conjunction with the population survey to collect more detailed data on a number of issues. The supplementary surveys provide labour market analysts with data required for more detailed analysis of the activities and behaviour of various population groups. Topics covered by supplementary surveys in 1986-87 include: persons not in the labour force; discouraged job-seekers;

migrants; weekly earnings of employees and non-wage benefits received; labour mobility; labour force experience; educational attainment; apprentices; attendance at educational institutions; transition from education to work; trade union membership; persons who had re-entered the labour force in the last twelve months; persons who had retired; and retirement intentions.

The labour component also operates an integrated system of employer surveys which provides quarterly data on employed wage and salary earners; average weekly earnings; and job vacancies and overtime; as well as annual data on the distribution and composition of employee earnings and hours. The component also produces monthly statistics on industrial disputes and annual statistics on trade union membership.

Activities and achievements during the year included:

- Publication, for the first time, of trend estimates for the major labour force series for Australia and each State, from which the underlying movements in the major components of the labour force can be identified more readily. In response to demand from various sources, but particularly from State government bodies, seasonally adjusted estimates for the States were also released.
- Conduct of a survey of major labour costs to collect data from the private sector in respect of 1985-86 regarding the cost to employers of employee earnings, payroll tax, workers' compensation and superannuation. This survey represents considerable progress towards providing information on labour 'on-costs', the lack of which has been identified as a major deficiency in labour market statistics. Investigations are proceeding with a view to collecting additional data so that estimates of costs per hour worked and costs per hour paid for can be calculated. It is planned to include public sector employers in future surveys.
- Continuation of work on rebasing the monthly indexes of award rates of pay which are produced using information provided by the wage fixing authorities. This work is well advanced and, when completed, will result in the incorporation of weighting patterns to more accurately reflect the composition of wage and salary earners in the labour force. The rebased indexes are expected to be ready for publication during 1987-88.

Social

The social component produces statistics relating to income, expenditure, welfare, housing, health, education, crime, justice and other social matters. Within the component there are three main work streams: the design and development of social surveys and the processing, dissemination and analysis of survey data; the compilation and analysis of data relating to areas of social concern and specific social groups; and the promotion of integrated social statistics through the development and dissemination of standard statistical concepts, definitions and classifications.

Social surveys are undertaken at both the national and State levels. Publications containing results from the national surveys present information and analysis principally at the national level, but some State details are also included. However, additional State publications containing detailed State data from the national surveys are also available. Publications relating to State-specific surveys provide information and analysis at the State level and often for geographical areas below State level. Computer tapes containing unidentifiable unit record data are available for the major surveys as a standard service. The records are normally at the level of persons, households or families.

During the year, data were released from the following surveys:

Household expenditure survey (1984).

Health survey (1983).

Child care survey (1984).

Telephone connections survey (1986).

Health insurance survey (1986).

Health risk factors survey (NSW, 1985).

Smoking survey (Queensland, 1985).

Alcohol consumption survey (South Australia, 1983).

Crime and crime prevention survey (South Australia, 1985).

Significant development work was undertaken during 1986-87 on two major national surveys while, at the same time, several other surveys at the national and State levels were in their field collection stage. Details are as follows:

- Continuation of development work for a national survey of disability and ageing, and a survey of housing, scheduled to be conducted in 1988.
- Development work for a national survey of child care (conducted in June 1987).
- Collection and preliminary processing of data from a national survey of income and its distribution (1986).
- Conduct of a survey on voluntary and unpaid work (NSW).
- Conduct of a pilot test for a time use survey (NSW).
- Conduct of a survey on domiciliary services (Victoria).
- Conduct of a survey on legal service usage (Queensland).

- Conduct of a survey on the use of alcohol, tobacco and analgesics (NT).

The NSW pilot test for a time use survey was designed primarily as a forerunner of a future national survey. However, because a substantial number of households were canvassed in the Sydney Statistical Division, selected broad summary results from the pilot test will be published. The data will provide insights into the amount of time spent on unpaid activity in the home as well as on specific caring activities relating to children and aged people. The pilot test was undertaken in the context of the Government's National Agenda for Women.

During the year a major analytical study was undertaken of the effects of government direct and indirect taxes and benefits on household income. The primary source of information was the 1984 Household Expenditure Survey and results of the study were released in the publication *The Effects of Government Benefits and Taxes on Household Income* (ABS Catalogue No. 6537.0).

For several years the ABS has undertaken a wide range of social surveys, encompassing many social issues. Because of the wealth of statistical information now available, a microcomputer-based directory of social statistics on floppy disk - DIRECT - has been developed. DIRECT became available in July 1987 and will enable users to identify the survey information available on specific topics, to define their needs in tabular form and to place an order for the tables they require. Future editions of the directory will include information on other social data sources as well as surveys.

During the year, releases of publications on social topics such as courts, hospital morbidity and schools continued on a regular basis. In addition, two new State publications were released as part of a program of social reports, and progress was made on two significant social reports at the national level. These were:

- Publication of a social report on women in Victoria in *Women* (ABS Catalogue No. 4112.2).
- Publication of a social report on low income households in South Australia in *Low Income Households, South Australia* (ABS Catalogue No. 4103.4).
- Development of a national social report on crime and justice in Australia (as a joint Bicentennial project with the Australian Institute of Criminology).
- Development of a national social report on children.

Work on classifications and standards during the year included the following:

- Release of the new *Australian Standard Classification of Occupations (ASCO) First Edition : Statistical Classification* (ABS Catalogue No. 1222.0). This represents the culmination of a major joint project undertaken over several years with the (then) Department of Employment and Industrial Relations. The classification places Australia in the front rank internationally in this area of classification activity.

- Release of the *ASCO Coding System (Unit Group Level)* for coding occupation survey responses to ASCO.
- Development of a comprehensive system of computer-assisted coding for ASCO which was first used to code occupations reported in the 1986 Census of Population and Housing. The system will soon be available on floppy disk to non-ABS users who wish to code occupation on the same (ASCO) basis as used for the 1986 Census and for the ABS's monthly labour force survey.
- Review of the basic classificatory variables (eg family status, birthplace) used in ABS social surveys with the aim of developing and publishing these classifications for general use.

Time series

The time series component comprises the sub-components: seasonal adjustment and econometric analysis. The seasonal adjustment sub-component is concerned with the maintenance and further development of seasonal analysis services to cover both publication and internal user requirements of the ABS and also, by arrangement, the requirements of other Commonwealth and State departments and authorities.

For many years the ABS has produced seasonally adjusted time series from which seasonal and trading day influences have been removed, but which still include the effects of various irregular influences. Resulting from work in the seasonal adjustment sub-component, a recent innovation has been the production of trend estimates in which the irregular influences have been damped to produce 'smoothed' seasonally adjusted time series. Two ABS Information Papers, *A Guide to Smoothing Time Series - Estimates of 'Trend'* (ABS Catalogue No. 1316.0) and *Time Series Decomposition - An Overview* (ABS Catalogue No. 1317.0), were published during 1986-87 to explain the methodology used in deriving both seasonally adjusted and trend estimates.

The econometric analysis sub-component undertakes maintenance and development work on the National Income Forecasting (NIF) and the Australian Medium Term Policy Simulation (AMPS) econometric models of the Australian economy and their associated databases. Its other activities during 1986-87 included:

- Technical input to the work of the Government's Joint Economic Forecasting Group.
- Use of econometric methods, time series analysis and related statistical techniques to help to improve ABS statistical output.
- Advice to external users about the availability and suitability of data for econometric and related statistical analysis and the use of analytical techniques.
- Investigation of the feasibility of producing labour force projections for the total population and for specific age/sex groups.

- Technical input into an analytical study of the effects of direct and indirect taxes and government benefits on household income.

Mathematical statistics

This component provides a specialised service in sampling and other mathematical statistics techniques within the ABS and, on a consultative basis, to other Commonwealth, State and overseas agencies.

Examples of this type of external service provided during 1986-87 are:

- Australian Meat and Livestock Corporation - assistance with sample design and sample selection for a survey to estimate the number of lambs sold for meat production in 1987.
- Department of Primary Industry - assistance with development of a statistical quality-monitoring scheme for exported Australian fresh fruit.
- Department of Transport - assistance with sample design for a survey to estimate motor vehicle seat belt usage and driver attitudes to the requirement to use seat belts.
- Public Service Board - assistance with processing and analysing data from a survey on the operation of the flexible working hours scheme in the Australian Public Service.
- Department of Sport, Recreation and Tourism - assistance to the Australian Tourism Research Committee on the survey methodology employed in the Domestic Tourism Monitor (a survey funded mainly by State authorities concerned with tourism to monitor domestic travel involving one or more nights spent away from place of usual residence).
- Department of Social Security (Queensland Office) - assistance with development of a regression model to predict unemployment levels to assist the Department in planning staffing levels throughout the State.
- Energy Authority of NSW - assistance with a regression analysis of manufacturing census data to be used in forecasting energy demand.
- South Australian Health Commission - assistance with sample design and questionnaire design for a longitudinal study of the aged in South Australia.

The component also encompasses research into statistical theory and methods, including techniques for conducting sample surveys. During the past year the ABS has commenced the development of a computer-assisted telephone interviewing system for the collection of data from businesses.

Statistical services and user liaison (SSUL)

This component comprises a small liaison unit in each of the ABS State Offices and the Darwin Office which is responsible for providing a flexible and responsive service to meet the priority statistical needs of the State and Northern Territory governments additional to the needs satisfied by the established, ongoing statistical output of the ABS. The work undertaken by the SSUL component often takes the form of statistical consultation services (eg survey questionnaire design, advice on survey sample construction) or the provision of an ABS officer outposted within a State government department or authority to carry out specific short-term statistical assignments. Consultation can involve merely a short telephone call or can result in several weeks of ABS effort, depending on the assistance being sought. The duration of outpostings of ABS personnel is generally of the order of three to six months.

The SSUL component undertakes special analyses of ABS data and produces publications containing results, typically using data from ABS household-based surveys and presenting results for sub-State regions. The component is also closely involved in the development and conduct of the annual State-specific ABS household surveys which provide important data for State governments on topics of particular concern, which vary from State to State.

Examples of activities and achievements during the year include:

- For the Victoria Police - provision of an outposted ABS officer to assist with the implementation of the Australian National Classification of Offences in a departmental crime reporting system.
- For the Queensland Department of Health - assistance in sample selection, questionnaire design and operational procedures for a case control study into cervical cancer.
- For the South Australian Department of Transport - assistance in the design, development and conduct of a travel survey to obtain information about the travel patterns of residents in the Adelaide Statistical Division.
- For the Tasmanian Land Information Directorate - provision of an outposted ABS officer to investigate methods of capturing and integrating data into a State-wide land information system.

Population surveys

The population surveys component is responsible for the development and conduct of all ABS household surveys which use trained interviewers to collect information from survey respondents. The component also provides personnel to carry out interviewer-enumerated segments of economic statistics collections. For example, interviewers will be used to collect information in the 1986-87 Agricultural Finance Survey.

A full description of the program of population surveys undertaken by the ABS appeared in the ABS Annual Report for 1983-84, at pages 7 to 11.

Activities and achievements during 1986-87 included the conduct of:

- monthly population surveys;
- a survey of income and housing costs;
- a survey of alternative working arrangements; and
- the 1986 Census Post-enumeration Survey.

Integrated register

The integrated register component is responsible for the maintenance of the ABS central register of businesses. Approximately 870 000 businesses are recorded on the register. Maintenance involves applying about one million changes each year to these records. The register plays a key role in the provision of integrated economic statistics by enabling consistent frameworks to be generated for ABS censuses and surveys.

Activities and achievements during the year included:

- Updating of the Recreation, Personal and Other Services Division of the register in preparation for the conduct of a survey of selected services industries in respect of reference year 1986-87.
- Updating some 180 000 'small' businesses recorded on the register as belonging to industries not covered by regular ABS economic collections to improve benchmark data for 'all-industries' surveys.

Data management

The data management component is responsible for improving the organisation of the ABS's statistical data holdings in order to increase their usefulness and reduce costs. Its primary function is to initiate review of, develop recommendations on, and monitor the implementation of policies, guidelines and procedures regarding data classifications, data integrity and security, data storage and retention and the efficient management of data through all stages of producing statistics.

Activities and achievements during the year included:

- Participation in the development of software for the ABS Data Dictionary to facilitate the management and manipulation of standard classifications.
- Participation in the development of design standards for statistical collection forms and the development of suitable guidelines.

- Assistance with the implementation of automated facilities for the deletion of obsolete data holdings.
- Development of form retention schedules.
- Investigations into the feasibility of developing a centralised output directory for ABS statistics.
- Development of a text retrieval system (Index of Administrative Decisions) to allow on-line access to administrative documents.

The data management component also undertakes activities associated with the development of the ABS's statistical computing systems, provides a secretariat service to the ABS Data Management Steering Committee and undertakes other specific projects and investigations as required by ABS management.

Computer operations and software

Most of the ABS's statistical processing is carried out on the Bureau's central computing installation (CCI) consisting of a Facom M382 mainframe computer located in the ABS Central Office and linked to each of the State Offices through a DEC-based communications network. The CCI is currently processing over one million separate jobs per year and the workload is rising as the ABS attempts to improve its level of service and increase the efficiency of its operations. The CCI is running at close to full capacity during prime shift time. The central installation also includes a Control Data 180/810 computer, the Control Data 3500 system having been removed from service at the end of 1986.

During the year the CCI was enhanced by the addition of more processor and disk storage. The processor storage enhancement allows the ABS to fully utilise the remaining power of the system. Disk storage enhancement will allow further reduction of dependence on the mass storage subsystem with a consequent improvement in user service times. A major initiative has been commenced to replace all existing CCI terminals in the ABS Central and State Offices with more modern colour terminals, many with local processing capability. This conversion will take place over the next three years.

Word processing equipment manufactured by Convergent Technologies is being progressively installed throughout the ABS Central Office. The installation period extends over two years during which time it will be linked into a local area network. Currently about two thirds of the typing/secretarial staff located in the Central Office have been provided with the new word processing facilities. Word processing equipment is being concurrently introduced in the ABS State Offices.

The use of microcomputers within the ABS Central and State Offices is expanding rapidly. Most of the microcomputers installed are IBM-compatible machines but there is a small number of Apple Macintosh machines installed for specific purposes such as forms design. Microcomputers were used extensively at the 1986 Population Census data transcription centre in Sydney to facilitate classification of census data.

When census processing is complete this equipment will be distributed to other areas of the ABS and will result during 1987-88 in a doubling of the number of microcomputers installed for general use. While microcomputer usage is generally 'standalone' at present, the use of local area networks and micro-mainframe links is expected to increase rapidly over the next twelve months.

Computer applications

During 1986-87, application systems for the processing of statistics for input-output tables, wholesale prices, building activity, engineering construction, manufacturing monthly production, stocks, capital expenditure and operating surplus, shipping and award wage rates indexes, and an administrative system for the payment of agents were completed or brought into operation.

A program of reviews of major applications was commenced, the purpose in each case being to determine the state of repair of each application system, whether it is meeting current objectives, whether it needs to meet new statistical requirements and whether the system can be made more efficient or effective by adopting new techniques.

Co-ordination

The component consists of four sub-components: legislation and co-ordination, planning, public relations and secretariat.

Through the legislation and co-ordination sub-component the ABS maintains contact with Commonwealth and State government departments and authorities in order to be aware of their statistical activities, their use of existing statistical collections and their current and future statistical needs. The Bureau also plays a continuing role in developing greater co-ordination of statistical activities across government agencies. In particular, it encourages the adoption of uniform standards and practices and fosters a co-ordinated approach to statistical development.

The main activities and achievements in the area of co-ordination were:

- The administration of the outposted officer service, through which ABS officers are located in other Commonwealth and State government agencies on both a short and long term basis to provide professional statistical advice and assistance. At 30 June 1987 there were 12 outpostings with 11 Commonwealth agencies in Canberra.
- Continuation of reviews of existing and proposed statistical collections by other Commonwealth agencies, as required under the ABS statistical co-ordination arrangements. Each of these reviews involves the production of a joint report, with the agency directly responsible for the collection concerned, on the compatibility of the statistics produced with data from other sources, the statistical quality of the work, the extent of duplication and the minimisation of respondent load.

During 1986-87 the ABS was notified of 32 collections, of which it was decided to initiate joint reviews in 17 cases. Seven reviews were completed in the year; of these six related to new collections and one to an existing collection. As a result of the joint review process, improvements were made to most of the collections, which were then considered to be satisfactory from a statistical co-ordination viewpoint.

- The maintenance of a central register of Commonwealth statistical collections published in *Register of Commonwealth Statistical Collections* (ABS Catalogue No. 1114.0). This publication is designed to serve as a guide to collection activities and available statistics and to assist in co-ordinating collections by departments and authorities. The present edition of the register provides details of over 900 Commonwealth statistical collections and is expected to be updated at regular intervals.
- At the State level, the ABS participates in the work of bodies established by State governments to co-ordinate the statistical activities and requirements of their departments and agencies. These bodies provide a priority-setting mechanism and a means of formulating a uniform State view on statistical requirements and other issues, and constitute a source of valuable advice and feedback on ABS work program proposals and activities in general.
- The main activities in the field of legislation involve the provision of advice on all aspects of law affecting the ABS, including the following:
 - Development of proposals for revision to Acts, Regulations and Ministerial Determinations.
 - Co-ordination of legal action, where necessary, with a view to obtaining completed forms from respondents.
 - Advice on and monitoring of statistical release practices under legislative provisions and determinations.
 - Operation of Freedom of Information (FOI) legislation within the ABS (see Appendix 6 for further information).

The planning sub-component has responsibility for the ABS planning system, and the implementation of the ABS Corporate Plan, details of which are given in Chapter 2 of this report.

The public relations sub-component aims to improve the Bureau's ability to communicate effectively with respondents and other sectors of the public. It aims also to improve the community's understanding of statistical needs and priorities and to make the Bureau's statistical output better known and used.

The main activities and achievements of the sub-component during the year included:

- Collection support was given to the 1986-87 Agricultural Census and the 1986-87 Services Industries Surveys through extensive media awareness campaigns and the production of brochures and other printed material. Other collections supported with media material included the labour costs survey.
- Dissemination support was given through media briefings organised for the first appearance of trend estimates in labour force surveys, and news releases were issued for a range of new publications. A range of printed material, media briefings and a television videotape were prepared to publicise the release of data from the 1986 Census of Population and Housing. Static ABS displays were mounted at exhibitions in Sydney, Melbourne and Canberra, the exhibitions being aimed primarily at the small business, retail and technology sectors.
- ABS year books were marketed more strongly during the year with the release of the 1986 Tasmanian Year Book being accompanied by brochures and wall charts for schools to complement the public launch. Year books for other States were supported by brochures and media material, and for the 1986 issue of Year Book Australia, an information kit for schools was provided.
- The availability of trade statistics through the new TELESTATS service was promoted to both the media and the potential market. The service was launched jointly with Telecom Australia at a function in September 1986.
- A small-scale research project was undertaken to evaluate the impact of the communication campaign organised for the agricultural census, and another survey investigated the views of university students towards ABS recruiting material.
- Media awareness courses were arranged to provide training for ABS staff who act as media contact officers for various statistical collections.

The public relations sub-component was heavily involved in a general review of the presentation and effectiveness of ABS collection forms, subsequent to a review of ABS performance in this area of its activities by the Communication Research Institute of Australia. Following this report, a Forms Management Committee was appointed to oversee the task of improving the performance of ABS statistical collection forms. This has resulted in considerable progress being made in four areas:

- Draft Forms Design Standards and Forms Development Guidelines have been developed and are now being evaluated within ABS collections, as a precursor to their adoption throughout the Bureau.
- Three microcomputers with graphics software facilities are being used for forms design work using these guidelines, allowing forms to be designed and produced for field testing and then modified quickly and easily for further testing.

- Training courses are being run which focus on the principles and practice of forms design and evaluation, including the efficient use of graphics software for forms design, implementation of draft standards and guidelines, and evaluation, so that each collection will have access to the means to improve the performance of forms.
- A small forms group is being established within the public relations sub-component which will provide a co-ordinated centre of advice, assistance and knowledge of forms design and forms performance to subject areas.

6 CORPORATE SERVICES SUB-PROGRAM

Objective

The objective of the Corporate Services Sub-program is to assist managers to achieve Australian Bureau of Statistics objectives through the provision of effective corporate management, and of efficient administration, planning and central support services.

Description

The diversity and cyclical nature of many of the activities involved in undertaking the ABS work program call for a wide range of human skills, technological support services, office support services and fluctuating staffing and physical accommodation requirements. These range from a continuing base of some 3 500 permanent staff from year to year supplemented by a number of temporary staff which peaks every five years to some 39 000 during the conduct of a census of population and housing.

The Corporate Services Sub-program directly supports the ABS Program by providing:

- executive leadership;
- a corporate strategy for the implementation of the ABS work program;
- personnel services, including salaries payment and conditions of service, establishments, recruitment, industrial relations, staff development and training;
- financial control and accounting services including budgeting allocations and monitoring resource usage;
- general office services including accommodation, security, internal consultancy, methods and internal audit; and
- strategic planning for computer systems and technological support services including both mainframe and microcomputer installations and associated network communication facilities.

Outputs of the sub-program

The sub-program provides the organisational infrastructure, management and planning systems, staff and equipment necessary to undertake both the day-to-day operations and long term strategic planning for the ABS Program including personnel policies designed to attract, develop and retain high quality staff. It is required to anticipate demand for services and supplies, provide control mechanisms to monitor resources according to component and sub-component allocations and priorities, advise management on trends and developments in the availability and usage of

resources, and provide advice and assistance to managers in monitoring and improving the efficiency and effectiveness of specific areas of operation within the ABS.

The Corporate Services Sub-program works in close contact with the Central Agencies (ie the Public Service Board, Department of Finance, Department of Administrative Services and the Australian Audit Office) in providing the necessary support to the ABS Program.

Performance of the sub-program

The ABS is developing performance indicators for this sub-program. In future annual reports it is expected that the performance of this sub-program will be assessed against the following performance indicators:

Availability of human and computing resources

- Comments on recruitment and turnover of staff.
- Proportion of staff resources devoted to personnel development and training.
- Percentage of computer batch jobs completed within targeted turnaround time.
- Average response time for on-line computer access.
- Comments on availability of terminals and microcomputers.

Development and maintenance of a better working environment

- Incidence of Repetition Strain Injury (RSI) (historical perspective).
- Incidence and duration of sick leave - with and without medical certificate (historical perspective).
- Number of claims for compensation.
- Number of accident reports.
- Incidence of invalidity and other retirements.

Financial Management

- Supplementation sought in Additional Estimates.
- AMF sought (i.e. funds sought from the Advance to the Minister for Finance).
- Increase in extent of devolution.
- Criticisms by Auditor-General, Parliament and other agencies.

- Average salary (SES, Other).
- Overtime as proportion of total salary bill.
- Cost of computer services per staff member.
- Cost of running and hiring cars per staff member.
- Total rental cost of accommodation.
- Average cost of accommodation per square metre.

Implementation of Public Service reforms

- Comments on Industrial Democracy (ID).
- Comments on Equal Employment Opportunity (EEO).

Development of Management Information System

- Comments on Management Information System development.

New initiatives

- Details of new initiatives.

The remainder of this chapter reviews the activities and achievements of each component of this sub-program during 1986-87.

Executive

The top structure and senior staff of the ABS are shown in Appendix 2, and details of the composition of the ABS Senior Executive Service are shown in Appendix 5.

During 1986-87 ABS officers in the Senior Executive Service participated in the following development activities:

<i>Activity</i>	<i>No. Attended</i>
Public Service Board Senior Executive Management Program	12
Department of Finance Financial Management Improvement Courses	4
Miscellaneous courses, seminars and conferences	21
<i>Total staff development activities attended</i>	<i>37</i>
<i>Total SES staff participation</i>	<i>18</i>

The ABS is in the process of reviewing the training and development opportunities available to its senior managers.

Personnel management

The personnel management component is responsible for the operational aspects of personnel management, human resource development and the development and implementation of personnel policies and practices (including the ABS equal employment opportunity program and industrial democracy plan). It also has responsibility for establishment reviews, job design and classification standards, and industrial relations.

The continuing demands of coping with the volume of operational work and pressures of implementing administrative reforms have expanded during the year with the introduction of new legislation, the need to respond to Service-wide changes to conditions of employment and the devolvement of additional responsibilities from the Public Service Board. To accommodate this, work has commenced on reviewing the overall functions of the component to identify efficiencies, including devolving some responsibilities to line managers, and to establishing administrative groups in line areas.

Activities and achievements during the year included:

- Staffing. Full details of the Bureau's staffing are shown in Appendix 5. The Bureau's demand for graduates has continued to be high particularly in the economic, statistics and computing science disciplines. A total of 114 graduates were recruited, 59 of these in the economic/statistics area and 55 in the computing science area.
- Industrial democracy (ID). Following the development of the industrial democracy plan, ID co-ordinator positions have been staffed and a national program of awareness-raising seminars was completed. All staff have been provided with a copy of the ID plan and a bulletin that provides staff with up-to-date information about relevant issues has been introduced. Employee participation is being encouraged through workplace meetings, training courses, work design pilot studies and office structures case studies. The ABS's management development program has been reviewed to incorporate industrial democracy issues and to emphasise participative management practices.
- Consultation with unions. As part of the ABS consultative arrangements with the unions, agreement was reached on the following issues:

The facilities to be provided for union representatives.

A consultation agreement on technological change.

The encouragement of union membership and participation.

A policy and procedures for the prevention of sexual harassment in the workplace.

Guidelines for the prevention and management of repetition strain injury (RSI).

A policy on the operation of screen-based equipment.

Overall, industrial relations continued to be stable with industrial disputes being limited to a recruitment issue that affected the collection of consumer price index statistics and some minor staffing matters at the 1986 Population Census Data Transcription Centre.

- Equal employment opportunity (EEO). The EEO program was ratified by the National Consultative Council and its implementation is underway. All EEO co-ordinator positions have been filled and initial awareness-raising activities completed. The EEO program and policy have been printed and distributed. A data base of EEO information was established and is being continuously updated. This will enable monitoring of progress in achieving EEO objectives and will help identify areas for future work.

Sexual harassment policy and guidelines were developed, ratified and distributed, and sexual harassment contact officers appointed in all offices.

Specialised training for members of designated groups has been offered and other specialist courses are being investigated and developed.

There are 108 sub-objectives in the EEO program. Many have been realised with the co-operation of relevant line areas throughout the ABS.

- Personnel development. A major reassessment of all personnel development activities was undertaken with the objective of defining a national personnel development strategy and improving the management development program. In conjunction with this, the general training programs were reviewed and redesigned to integrate EEO, ID, and occupational health and safety (OHAS) initiatives, and to address matters arising from the review of office structures.

Training in statistical, managerial, computing and clerical skills and personnel-related issues increased during the year. Officers (including SES staff) spent a total of 112.6 staff years (or 3.1 per cent of total staff usage, excluding Population Census Data Transcription Centre staff) attending development activities, as follows:

<i>Activity</i>	<i>Staff Years</i>
Paid leave under studies assistance	34.0
In-house training -	
Technology training (ADP)	41.6
Other	16.8
External courses and conferences	12.4
Interchange and other schemes	7.8

The ABS specialist training units, located in the personnel management and computer services areas, together spent a total of 20 staff years conducting a variety of general and specialised training courses as well as assessing training needs, designing new training programs and/or improving existing ones.

- Work design. The Joint Management Review (JMR) of Management Services and Top Management in State Offices conducted during 1984-85 identified outmoded job design as a source of morale and productivity problems in many areas of the ABS. In response, a work design project team has been established and a series of pilot studies in participative work redesign have been initiated. The experience gained in these pilot studies, together with successful implementation of the integrated office structures currently being developed in the Service, should enable the ABS to respond effectively to the problems identified by the JMR and to the changing work environment brought about by changing technologies in the workplace.

Resource management

The resource management component co-ordinates the preparation of financial and staff budgets, prepares submissions to central agencies and participates in negotiations with those agencies on these matters. It provides advice and guidance on estimating for finance and staff resources, makes recommendations on the allocation of approved resources and monitors and analyses expenditure and staff usage.

The component is also responsible for the development and implementation of automated management information systems relating to finance, personnel and establishments, including the provision of documentation and training.

Activities and achievements during the year included:

- Program budgeting. During 1986-87 a great deal of effort was devoted to preparing for the transfer of ABS accounting to a program budgeting basis in 1987-88. The program structure to be used is described on page 15 of this report.

The ABS will adopt human resource budgeting processes in 1987-88 which will involve the allocation of specific salary budgets (in addition to average staff level (ASL) targets) and the requirement for managers to meet their workloads within the limits of those budgets.

- Administrative systems. Considerable effort has been put into the development of management information systems required for the administration of human resource budgeting and program budgeting. Some systems will be operational in 1987-88 to monitor salary expenditure by operational areas and to estimate staffing costs for human resource budgets in future years.

The automation of finance and personnel systems is also being investigated and it is intended that the best available systems for these purposes will be introduced progressively during the next two years.

- Internal audit. A unit within the component is responsible for internal audit activities, devising and conducting audits for corporate management and advising on the existence, effectiveness, reliability and efficiency of the various systems of internal control within the ABS.
- All ABS Offices received detailed internal audit advice on the adequacy and operation of their management and control systems. The main functions audited were:
 - personnel operations (payroll, record keeping systems);
 - information services (debtors, stock control, management information);
 - public moneys;
 - delegations (relevance, adequacy, exercise);
 - asset management (acquisition, control, disposal); and
 - travel (arrangements, allowances).

In all, there were 26 audit assignments and 20 reports were issued during the year.

Special assistance was given to the 1986 Population Census Data Transcription Centre, and to the Northern Territory Office on its assumption of full financial responsibilities.

A special effort has been made to assist the interviewer survey operations component during the last two years and improved response rates, error rates, unit costs, and efficiency have been achieved in this component as a result of the involvement of the internal audit unit.

A major review of the internal audit workload was completed during the year and a revised work program drawn up for management endorsement together with a proposal to strengthen the establishment of the unit. These matters are currently under consideration.

Management support

This component provides a range of logistical support functions aimed at facilitating the achievement of corporate objectives. These functions fall into four groups.

The first group covers accounts and travel and includes payment of all accounts, administration of ABS funds, booking and arranging logistical aspects of internal and overseas travel and staff transfers, and provision of pay office and Collector of Public Moneys services.

The second group covers planning, obtaining agreement to, and implementation of, accommodation, repairs and maintenance, occupational health and safety and building safety programs; furniture and fittings; purchasing and administration of general office stores; assessing and responding to client needs for courier, interstate freight, mail, telephone, photocopying and printing services; preparation of financial estimates and monitoring of expenditure on these items.

The third group includes management of ABS assets; waste handling and cleaning services; registry and messenger services; archives and general storage; national and physical security; the issue of identity cards and safekeeping of accountable forms.

The fourth group includes responsibility for the overall operations of the keyboard group performing typing, secretarial, word processing, audio-typing, central telex and facsimile transmission services, and co-ordination of RSI prevention and management issues.

Activities and achievements during the year included:

- Scrutiny reviews. In the fields of accounts processing and travel the component provided information requested in efficiency scrutinies and commented on draft reports. The acceptance by the Government of the scrutiny recommendations will reshape the manner in which purchasing, accounts processing and travel arrangements tasks are undertaken in 1987-88. Service-wide reviews of Government purchasing arrangements, property management and acceleration of a policy of full cost recovery on services received from, and provided to, other Government departments, together with the introduction of the Commonwealth Corporate Credit Card Scheme, will also change many of this component's operations in 1987-88.
- Accommodation. During 1986-87 a great deal of effort went into negotiations and liaison with the Department of Local Government and Administrative Services, the Department of Housing and Construction, the National Capital Development Commission and staff unions, on all aspects of the major remedial works being undertaken to refurbish Cameron Offices in Canberra. Additional accommodation was negotiated for ABS staff in Central Office, and new accommodation obtained for the Victorian, Queensland and Tasmanian Offices. The Queensland Office has been relocated and the Victorian and Tasmanian Offices are scheduled to be relocated in 1987-88.
- Occupational health and safety. The ABS has joint management/union occupational health and safety (OHAS) committees which addressed the formulation and implementation of an ABS-wide policy on achieving a smoke-free work environment, the quality and safety of the ABS working

environment and equipment, health promotion and the management of RSI. Other OHAS outcomes included liaison with external authorities to complete the asbestos removal program, cleaning and stabilisation of airconditioning, the reduction of glare and noise factors in Cameron Offices and commencement of a three-year catch-up program to overcome shortfalls in ergonomic furniture in all ABS Offices and to correct related OHAS deficiencies in ABS accommodation.

The incidence of RSI is decreasing in the ABS as a result of emphasis on staff training, and adherence and attention to rehabilitation. Total ABS staff with RSI symptoms fell from a peak of 174 in March 1986 to 112 by March 1987 and the number continues to decline. Staff years lost as a result of RSI have continued to decline from a peak of 15.8 in the December 1985 quarter to seven staff years in the March 1987 quarter. In 1986-87 45 staff employed at the 1986 Population Census Data Transcription Centre reported RSI symptoms. A total of one staff year of effort was lost at the Centre due to RSI.

A fire safety audit of Cameron Offices resulted in the installation of an additional 93 fire extinguishers, some minor building modifications and commencement of work to install an early-warning intercom system throughout Cameron Offices.

- Security. A major review of ABS-wide security issues was undertaken during the year. As a result, a small Security Section has been established and will be staffed in 1987-88. It will be responsible for investigating and advising management on ABS-wide security issues, including policy and procedures necessary to ensure the protection of staff, confidential data and information, and ABS assets.
- Keyboard group. The work of the keyboard group involved coping with significant change as a result of the continuing expansion of word processing systems and close involvement of staff and their supervisors in considering and responding to issues arising from the Public Service Board's office structures review. A major training effort focused on improving and broadening the skills of keyboard staff.

Management review

The management review component is responsible for reviewing existing management services processes, procedures, guidelines and manuals to clarify line management responsibilities for various functions. The aim is to simplify procedures wherever possible, look for possibilities for devolving responsibilities to line managers, and to drop low priority work altogether. The overall objective is to increase the effectiveness of existing resources and save resources for redeployment on higher priority work. The component is also responsible for co-ordinating the provision of administrative support facilities for major ABS projects such as the census of population and housing.

Activities and achievements during the year included:

- A review of the staff selection procedures used in all ABS Offices. The objectives of the review were to reduce resource usage, streamline processes, standardise procedures and delegate authority (where appropriate) to line management. PSB streamlining provisions were incorporated into the revised system and reflected in documentation developed to support the procedures. The review recommendations are being implemented and will result in efficiencies, quicker filling of positions and improved personnel practices in regard to staff selection.
- The development, in conjunction with the management support component, of a complete set of Statistician's Instructions for staff involved in purchasing, payment of accounts and asset control functions. This meets the Department of Finance requirements that staff be issued with formal documentation about their responsibilities and appropriate procedures where they are responsible for accountable assets.
- During 1986-87, the component continued to monitor the delegation of powers to ensure that the objective of devolution to the lowest appropriate level is maintained. The automated system developed and implemented during 1985-86 has handled a high workload emanating from streamlining changes, introduction of permanent part-time provisions, and reviews of delegations in State Offices.
- Assistance was also given to the 1986 Population Census Data Transcription Centre in developing a staff appraisal system. The system was required as an indicator of suitability when an order of merit was required for deciding which staff should be offered extended employment during the processing period.

Computer technical services and planning

This component provides information technology planning and a range of technical support services. The planning activities cover large- and small-scale computing, communications facilities and related technologies. The technical support services include technology training, research into new technologies and support for software elements of the statistical computing environment.

The ABS has for the past several years produced an annual ADP strategic plan under arrangements co-ordinated by the Public Service Board. On the Board's recommendation, the Government has decided that such plans should now be prepared at three-yearly intervals. The first of the new plans, to be renamed Information Technology Strategy Plans (ITSP), is to be developed by early 1988. The ABS's ITSP will be based firmly on the objectives and strategies of the ABS Corporate Plan.

Plans are being developed to enhance the ABS's ageing data communication network by a progressive replacement of elements of the existing network with more cost-effective hardware and software offering a wider range of facilities. The first stage of this project is in progress in the ABS Central Office. Improvements will be extended to State Office computing installations as network enhancement progresses.

The ABS maintains a statistical data processing environment which includes fourth generation language-type facilities and supports major involvement by statistical staff in their own processing requirements. The ABS uses ADABAS to provide database management and data dictionary facilities on the CCI. Use of ABS data by individual applications systems is controlled through a data dictionary which is a locally developed extension of the ADABAS data dictionary.

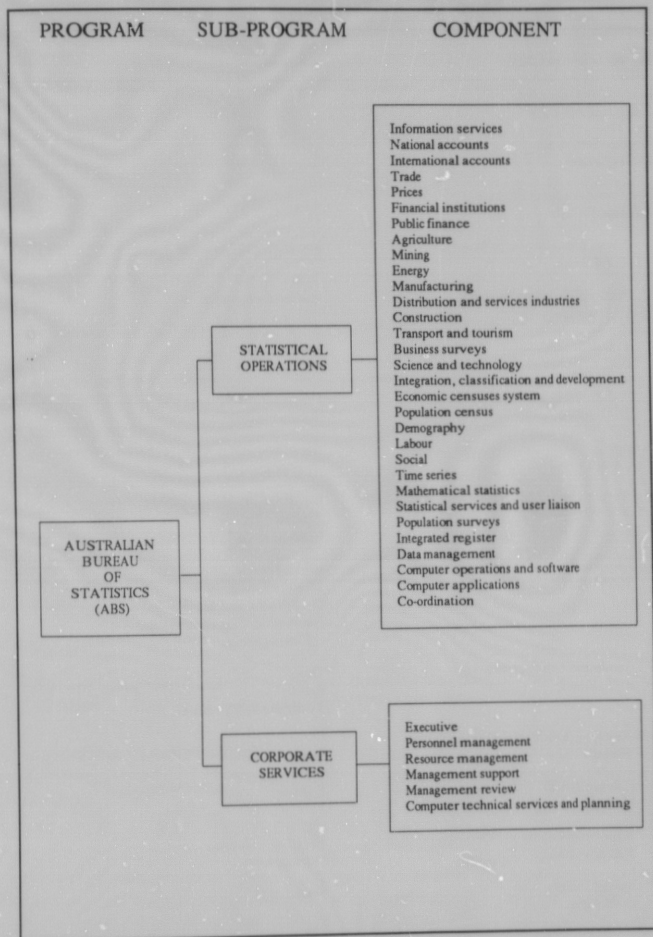
During the latter half of the year pilot studies were commenced to evaluate the use of a number of new technologies including computer-assisted telephone interviewing, computer-assisted coding and 'expert systems'. This is part of a wider commitment to technical research and development to support ABS initiatives in paper and electronic dissemination of statistics and alternative means of data capture and processing.

Recruitment, retention and training of ADP staff, in the face of high turnover and competition from both private and public sector bodies, continue to be difficult areas. As a result of a major commitment to, and streamlining of, graduate recruitment processes the ABS has managed to satisfy its computer systems officer intake requirements this year, but is also participating actively in Service-wide initiatives aimed at future improvement in the ability of the Australian Public Service as a whole to recruit and retain staff. In spite of the heavy commitments to general training caused by staff recruitment and turnover, the ABS has managed to keep abreast of the demand for small-scale technology training. This demand can be expected to grow significantly as end-user computing expands, leading to pressure to exploit alternative means of training such as external courses and computer-based training.



APPENDICES

Appendix 1 THE ABS PROGRAM BUDGETING STRUCTURE



Appendix 2 TOP STRUCTURE AND STAFF OF THE ABS WITH RESPONSIBILITY FOR PROGRAM ELEMENTS

<i>Top Structure and Staff</i>	<i>Responsibility for Program Components</i>
Australian Statistician <i>I. Castles, AO, OBE</i>	
Deputy Statistician <i>W. McLennan</i>	
Economic Accounts Division <i>F.J. von Reibnitz</i>	
International Accounts Branch <i>B.J. Dunlop</i>	International Accounts
National Accounts Branch <i>P.J. McCarthy</i>	National Accounts
Prices Branch <i>L.C. Clements</i>	Prices
Public and Private Finance Branch <i>D.C. Efford</i>	Financial Institutions Public Finance
Economic Censuses and Surveys Division <i>F.D. Bagley</i>	
Construction and Business Surveys Branch <i>A.J. Whittington</i>	Construction Business Surveys Economic Censuses System
Manufacturing and Distribution Branch <i>R.P. Green</i>	Mining Manufacturing Distribution and Services Industries Integration, Classification and Development
Trade and Transport Branch <i>P.G. Howell</i>	Trade Energy Transport and Tourism
Demography, Labour and Social Division <i>T.J. Skinner</i>	
Labour Branch <i>Vacant</i>	Labour
Population Census and Demography Branch <i>J.K. Cornish</i>	Population Census Demography
Social Branch <i>M.D. Giles</i>	Social

<i>Top Structure and Staff</i>	<i>Responsibility for Program Components</i>
Statistical and User Services Division <i>D.J. Trewin</i>	
Data Services Branch <i>J.H. Struik</i>	Agriculture Science and Technology Integrated Register Data Management
Statistical Services Branch <i>D.C. Leaver</i>	Mathematical Statistics Population Surveys
User Services Branch <i>D.A. Harding</i>	Information Services Time Series
Computer Services Division <i>W.O. Egan</i>	
Technology Planning Branch <i>B.H. Crook</i>	Computer Technical Services and Planning (part)
Applications Branch <i>R.H. Morcom (acting)</i>	Computer Applications
Operations and Software Branch <i>J.V. Crocker</i>	Computer Operations and Software
Technical Services Branch <i>B.M. Fitzpatrick (acting)</i>	Computer Technical Services and Planning (part)
Co-ordination and Management Division <i>R.W. Edwards</i>	
Co-ordination Branch <i>J.E. Dulley</i>	Co-ordination
Personnel Management Branch <i>J.W. Maurer</i>	Personnel Management
Resource Management Branch <i>C.J. Dent</i>	Resource Management Management Support Management Review
Principal Advisor (Economic Statistics) <i>G.J. Sarossy</i>	

STATE OFFICES

The offices in State capitals and in Darwin are headed by:

Sydney	<i>J. F. Wilson</i>
Melbourne	<i>E. D. Bourke</i>
Brisbane	<i>D. N. Allen</i>
Perth	<i>B. N. Pink</i>
Adelaide	<i>G. C. Sims</i>
Hobart	<i>G. D. Cocking</i>
Darwin	<i>R. J. Rogers</i>

Note: Responsibility for activities of the Statistical Services and User Liaison component in each State rests with the heads of the above offices

Appendix 3 **ABS PROGRAM EXPENDITURE AND RECEIPTS:
1985-86, 1986-87 AND ESTIMATES: 1987-88**

	1985-86	1986-87		1987-88
	Actual	Total Appropriation	Actual	Estimates (a)
	\$'000	\$'000	\$'000	\$'000
EXPENDITURE				
Salaries etc -				
Salaries	88 871	107 486	107 126	95 502
Overtime	864	2 267	2 219	1 190
Total 671.1.01	89 735	109 753	109 345	96 692
Administrative expenses -				
Travel and subsistence	2 499	3 539	3 527	2 790
Office requisites	7 901	5 282	5 656	5 985
Postage and telephones	5 271	6 000	5 808	5 624
Computer services	3 659	3 611	3 728	3 885
Incidentals	4 805	6 427	4 850	4 163
Fringe benefits tax	-	82	76	126
Payments to agents	6 983	28 155	(b) 26 387	6 565
Total 671.1.02	31 118	53 096	50 031	29 138
Total sub-division 671.1	120 853	162 849	159 376	125 830
Compensation and legal expenses	450	1 370	1 370	1 162
Total sub-division 671.2	450	1 370	1 370	1 162
Total Division 671	121 303	164 219	160 746	126 992
Plant and equipment	2 620	4 493	4 493	4 782
Total Division 979	2 620	4 493	4 493	4 782
Special Appropriations -				
Australian Statistician	23	92	93	97
Australian Statistics Advisory Council	15	17	16	19
Total Special Appropriations	38	109	109	116
Total expenditure	(b) 123 961	168 821	(b) 165 347	131 890
RECEIPTS				
Miscellaneous revenue -				
Proceeds from 'for sale' publications (c)	458	566	484	(d) 3 261
Proceeds from sale of special compilations of foreign trade statistics	185	200	171	200
Recovery of costs for use of ABS computers by client organisations	13	12	24	20
Recovery of telephone costs from non-ABS tenants of Cameron Offices	204	-	31	-
Other revenue	307	182	223	219
Total miscellaneous revenue	1 167	960	933	3 700
TOTAL OUTLAYS	122 794	167 861	164 413	128 190

(a) As included in Appropriation Bills Nos 1 and 2 and Special Appropriations. (b) Includes expenditure associated with the conduct of the 1986 Census of Population and Housing (totalling \$8.452m in 1985-86 and \$44.832m in 1986-87). (c) Excludes receipts by AGPS from sales of ABS publications. (d) Increased revenue from enhanced cost recovery on ABS publications.

Note: Any differences between totals and sums of components are due to rounding.

Appendix 4 **ABS PROGRAM EXPENDITURE - ESTIMATES OF EXPENDITURE BY COMPONENT**

Estimates of direct and total expenditure by components (previously called ABS programs) have been presented in ABS Annual Reports for many years. These estimates were developed to assist ABS in its planning process by the allocation of financial costs between statistical and service components. The total cost of individual statistical components was estimated by distributing the costs of service components according to estimates of their use by individual statistical components.

The basis of these estimates differs from that used in the Program Budgeting cost attribution procedures recently introduced into the Australian Public Service accounting systems in that the estimates are not "directly verifiable". Nevertheless, the ABS believes that the concepts adopted in its estimates of direct and total expenditure produce a useful analysis of the nature of its operations and accordingly estimates for the last three years are shown in the table on the following page. In future years the ABS hopes to adopt a basis of cost attribution in its ongoing accounting systems which will permit the preparation of details of direct expenditure by component using standard Program Budgeting accounting procedures.

The basis of the estimates of direct and total expenditure is as follows:

- **Direct expenditure** represents all expenditure directly attributable to components (such as salaries attributed on the basis of actual payments, and direct expenditure on overtime, and travel and subsistence) plus an estimated distribution of major Corporate Service overheads (such as postage, telephones, printing etc). General printing costs of ABS publications are attributed to the Information Services component.
- **Total expenditure** allocates the cost of general statistical service components (such as Computer Operations and Software, Integrated Register, and Population Surveys) and all Corporate Services expenditures to individual Statistical Operations components according to estimates of usage of such services.

The timing of periodic collections (for example the Retail Census in 1986-87, the Transport Industry Survey in 1984-85, and the Household Expenditure Survey in 1984-85) are responsible for large year-to-year movements. Because of the size and large annual variations caused by the quinquennial cycle of the population census, costs for that component have been excluded from the main part of the table.

Due to the nature of the estimation process, the sum of estimates of direct expenditure for components will not agree with totals for sub-programs shown elsewhere in this report. The table below shows a comparison of such sub-program totals on a direct expenditure basis, and according to Program Budgeting (PB) conventions.

	1984-85		1985-86		1986-87	
	Direct Basis	PB Basis	Direct Basis	PB Basis	Direct Basis	PB Basis
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Statistical Operations sub-program (a)	91 058	90 004	104 177	94 219	143 148	132 246
Corporate Services sub-program	15 778	26 858	17 164	29 742	19 830	33 101
Plant and Equipment (b)	10 026	..	2 620	..	2 369	..
ABS Program	116 862	116 862	123 961	123 961	165 347	165 347

(a) Includes plant and equipment for Population Census, on direct expenditure basis. (b) Attributed to sub-program on PB basis. Excludes plant and equipment for Population Census.

ABS PROGRAM - ESTIMATES OF EXPENDITURE BY COMPONENT: 1984-85 TO 1986-87

Program element	1984-85			1985-86			1986-87		
	Direct	Total (a)		Direct	Total (a)		Direct	Total (a)	
	\$'000	\$'000	%	\$'000	\$'000	%	\$'000	\$'000	%
STATISTICAL OPERATIONS									
Information services	5 844	..	..	6 429	..	..	6 410	..	..
National accounts (b)	1 631	2 822	2.8	1 724	3 194	3.0	1 874	3 168	2.9
International accounts	2 298	4 250	4.3	2 370	4 205	3.9	2 391	3 905	3.6
Trade	2 659	5 649	5.7	2 651	5 763	5.4	2 546	5 552	5.1
Prices	3 162	4 577	4.6	3 604	5 370	5.0	3 774	6 102	5.6
Financial institutions	1 103	1 927	1.9	1 112	1 952	1.8	1 218	2 180	2.0
Public finance	2 383	4 751	4.8	2 427	4 786	4.5	2 787	5 039	4.6
Agriculture	3 404	8 405	8.4	3 671	8 763	8.2	3 725	8 778	8.1
Mining	558	1 041	1.0	545	1 294	1.2	585	1 286	1.2
Energy	213	680	0.7	391	2 167	2.0	252	610	0.6
Manufacturing	2 985	7 058	7.1	3 545	7 899	7.4	2 205	4 711	4.3
Distribution and services industries	1 617	4 483	4.5	2 360	6 754	6.3	4 503	14 630	13.5
Construction	2 159	7 371	7.4	2 997	8 582	8.0	2 505	5 152	4.7
Transport and tourism	1 951	5 513	5.5	2 381	4 870	4.5	1 512	2 840	2.6
Business surveys	1 691	3 714	3.7	1 915	4 224	3.9	1 866	3 994	3.7
Science and technology	251	671	0.7	285	592	0.6	236	460	0.4
Integration, classification and development	1 124	..	..	1 157	..	..	1 245	..	..
Economic censuses system	1 014	..	..	1 204	..	..	2 504	..	..
Demography	2 016	3 941	3.9	2 101	3 979	3.7	2 208	4 207	3.9
Labour	4 894	20 628	20.6	5 917	22 203	20.7	5 413	24 556	22.6
Social	5 562	11 680	11.7	5 599	9 447	8.8	5 864	10 342	9.5
Time series	772	819	0.8	918	1 008	0.9	967	1 090	1.0
Mathematical statistics	1 377	..	..	1 467	..	..	1 537	..	..
Statistical services and user liaison	1 902	..	..	2 006	..	..	1 809	..	..
Population surveys	10 016	..	..	10 088	..	..	11 022	..	..
Integrated register	5 285	..	..	4 545	..	..	4 470	..	..
Data management	325	..	..	325	..	..	277	..	..
Computer operations and software	12 020	..	..	12 171	..	..	12 443	..	..
Computer applications	5 787	..	..	6 037	..	..	6 014	..	..
Coordination	1 101	..	..	1 655	..	..	1 420	..	..
CORPORATE SERVICES									
Executive	2 705	..	..	2 832	..	..	3 337	..	..
Personnel management	4 170	..	..	4 646	..	..	5 677	..	..
Resource management	675	..	..	796	..	..	910	..	..
Management support	5 656	..	..	6 116	..	..	6 639	..	..
Management review	..	..	..	..	..	..	62	..	..
Computer technical services and planning	2 572	..	..	2 570	..	..	3 174	..	..
Non ABS (c)	..	..	..	204	204	0.2	31	31	..
TOTAL EXCL. POPULATION CENSUS AND PLANT AND EQUIPMENT									
	102 880	99 977	100.0	110 708	107 254	100.0	115 409	108 630	100.0
Population census (d)	3 956	6 859	..	10 633	14 087	..	47 569	54 348	..
Plant and equipment (e)	10 026	10 026	..	2 620	2 620	..	2 369	2 369	..
ABS PROGRAM TOTAL	116 862	116 862		123 961	123 961		165 347	165 347	

(a) Statistical components only; includes estimated costs of service components allocated in accordance with usage on statistical components. (b) The costs of collecting data used in compiling the national accounts are included in the respective subject matter programs. (c) Telephone costs incurred by non-ABS tenants of Cameron Offices (subsequently recovered). (d) Includes plant and equipment for Population census. (e) Includes expenditure on the computer enhancement program. Excludes plant and equipment for Population Census.

Note: Any differences between totals and sums of components are due to rounding.

Appendix 5 ABS STAFFING

TABLE 5.1 DISTRIBUTION OF ABS STAFF BY SUB-PROGRAM, COMPONENT AND LOCATION: 1986-87

	Average staff levels, 1986-87 (a)										
Program element	Can-ber-ra	NSW	Vic.	Qld	WA	SA	Tas.	NT	DTC (b)	Total	
STATISTICAL OPERATIONS											
Information services	83	26	24	17	12	12	6	2	..	182	
National accounts	55	2	1	..	..	..	..	..	..	58
International accounts	73	..	..	..	..	..	..	..	..	73
Trade	75	..	..	2	8	1	4	..	..	90
Prices	54	19	18	8	8	7	4	3	..	121	
Financial institutions	40	..	..	..	..	..	..	..	..	40
Public finance	34	11	12	8	7	7	4	1	..	84	
Agriculture	27	27	26	19	15	12	7	1	..	134	
Mining	4	5	3	5	2	..	1	1	..	21	
Energy	7	..	..	..	..	..	..	..	..	7
Manufacturing	13	17	18	7	6	5	2	..	..	68
Distribution and services industries	21	49	33	22	13	13	7	2	..	160	
Construction	23	21	17	10	7	5	4	2	..	89	
Transport and tourism	19	6	4	13	5	3	2	2	..	54	
Business surveys	37	9	8	5	2	4	1	1	..	67	
Science and technology	8	..	..	..	..	..	..	..	..	8
Integration, classification and development	33	1	1	1	1	1	..	..	..	38
Economic censuses system	17	24	19	11	8	8	3	..	..	90
Population census	44	5	4	3	3	3	2	2	1 015	1 081	
Demography	26	14	12	8	6	5	3	1	..	75	
Labour	78	40	28	14	10	10	7	4	..	191	
Social	82	27	14	22	10	14	4	..	..	173
Time series	29	..	..	..	..	..	..	..	..	29
Mathematical statistics	42	..	1	..	..	..	1	..	..	44
Statistical services and user liaison	..	12	15	9	9	12	3	1	..	61	
Population surveys	35	37	33	39	21	24	10	5	..	204	
Integrated register	22	48	36	22	14	12	3	1	..	158	
Data management	6	..	..	..	..	..	..	..	..	6
Computer operations and software	164	50	39	33	26	22	12	..	..	346
Computer applications	115	12	9	12	11	13	11	..	..	183
Co-ordination	30	1	1	1	..	..	1	..	..	34
Total	1 296	463	376	291	204	193	102	29	1 015	3 969	
CORPORATE SERVICES											
Executive	29	5	4	4	4	4	5	3	..	58	
Personnel management	88	19	18	13	12	11	7	2	..	170	
Resource management	18	3	2	1	1	..	..	..	..	25
Management support	133	34	36	19	16	18	12	4	..	272	
Management review	1	..	..	..	..	..	..	..	..	1
Computer technical services and planning	88	..	..	..	..	..	..	..	..	88
Paid inoperative staff (c)	37	11	12	9	3	11	3	2	..	88	
Total	394	72	72	46	36	44	27	11	..	702	
TOTAL AVERAGE STAFF LEVELS											
	1 690	535	448	337	240	237	129	40	1 015	4 671	

(a) Comprises full-time staff and part-time staff at their full-time equivalent. Excludes unpaid inoperative staff. Where officers undertake duties within more than one component, they have been classified to that component which occupies most of their time. (b) 1986 Population Census Data Transcription Centre located in Sydney. (c) For example staff on long service leave, extended sick leave, etc for periods of twelve weeks or longer.

Note: The symbol .. can mean either 'less than half' or 'nil'.

TABLE 5.2 TOTAL ABS STAFF BY CLASSIFICATION, LOCATION AND SEX,
AT 30 JUNE 1987 (a)

Classification	Can- berra	NSW	Vic	Qld	WA	SA	Tas	NT	DTC (b)	Total
MEN										
Australian Statistician	1	-	-	-	-	-	-	-	-	1
Senior Executive Service	24	1	1	1	1	1	-	-	-	29
Clerical Administrative (c)- Classes 10 and 11	47	3	2	2	2	3	1	1	-	61
Class 9	102	7	8	4	4	3	3	-	1	132
Class 8	116	20	14	14	13	10	6	3	1	197
Class 7	100	1	4	5	2	3	3	-	-	118
Class 6	93	34	29	23	21	19	5	4	-	228
Class 5	69	37	21	14	20	16	12	4	-	193
Class 4	64	42	40	38	27	19	17	8	-	255
Class 2/3	59	44	32	21	12	15	11	3	-	197
Class 1	28	34	24	19	15	21	1	-	-	142
Computer Systems Officer- Grades 4 and 5	28	1	-	1	1	1	1	-	-	33
Grade 3	40	-	-	-	-	1	1	-	-	42
Grade 2	67	2	3	4	4	2	6	-	-	88
Grade 1	56	3	4	2	2	2	2	-	-	71
Librarians	1	-	-	-	-	-	-	-	-	1
Clerical Assistants	58	24	26	14	9	2	12	1	-	146
Keyboard Staff	-	3	3	-	-	-	-	-	-	6
Other Classifications	105	15	26	5	4	8	7	2	-	172
TOTAL PAID STAFF	1 058	271	237	167	137	126	88	26	2	2 112
Unpaid inoperatives	16	9	3	4	1	5	4	-	-	42
TOTAL STAFF	1 074	280	240	171	138	131	92	26	2	2 154
WOMEN										
Senior Executive Service	1	-	-	-	-	-	-	-	-	1
Clerical Administrative (c)- Classes 10 and 11	6	-	-	1	-	-	-	-	-	7
Class 9	16	2	1	1	-	-	-	-	-	20
Class 8	28	-	4	-	-	1	-	-	-	33
Class 7	20	1	1	2	1	1	2	-	-	28
Class 6	43	4	6	2	2	3	-	1	-	61
Class 5	49	20	17	9	2	6	2	1	-	106
Class 4	66	37	22	15	8	11	3	5	-	167
Class 2/3	71	31	18	30	16	18	7	6	-	197
Class 1	28	24	33	13	10	22	1	1	-	132
Computer Systems Officer- Grades 4 and 5	2	-	-	-	-	-	-	-	-	2
Grade 3	9	1	-	1	1	-	-	-	-	12
Grade 2	10	2	-	-	1	-	1	-	-	14
Grade 1	16	-	1	1	2	-	-	-	-	20
Librarians	9	1	1	1	-	-	-	-	-	12
Clerical Assistants	114	47	47	35	11	8	9	6	-	277
Keyboard Staff	150	65	48	35	22	17	17	1	-	355
Other Classifications	56	7	3	7	7	7	1	-	-	88
TOTAL PAID STAFF	694	242	202	153	83	94	43	21	-	1 532
Unpaid inoperatives	13	6	1	8	1	4	1	-	-	34
TOTAL STAFF	707	248	203	161	84	98	44	21	-	1 566

For footnotes see end of table.

TABLE 5.2 TOTAL ABS STAFF BY CLASSIFICATION, LOCATION AND SEX,
AT 30 JUNE 1987 (a) (continued)

Classification	Can- berra	NSW	Vic	Qld	WA	SA	Tas	NT	DTC (b)	Total
TOTAL										
Australian Statistician	1	-	-	-	-	-	-	-	-	1
Senior Executive Service	25	1	1	1	1	1	-	-	-	30
Clerical Administrative (c)-										
Classes 10 and 11	53	3	2	3	2	3	1	1	-	68
Class 9	118	9	9	5	4	3	3	-	1	152
Class 8	144	20	18	14	13	11	6	3	1	230
Class 7	120	2	5	7	3	4	5	-	-	146
Class 6	136	38	35	25	23	22	5	5	-	289
Class 5	118	57	38	23	22	22	14	5	-	299
Class 4	130	79	62	53	35	30	20	13	-	422
Class 2/3	130	75	50	51	28	33	18	9	-	394
Class 1	56	58	57	32	25	43	2	1	-	274
Computer Systems Officer-										
Grades 4 and 5	30	1	-	1	1	1	1	-	-	35
Grade 3	49	1	-	1	1	1	1	-	-	54
Grade 2	77	4	3	4	5	2	7	-	-	102
Grade 1	72	3	5	3	4	2	2	-	-	91
Librarians	10	1	1	1	-	-	-	-	-	13
Clerical Assistants	172	71	73	49	20	10	21	7	-	423
Keyboard Staff	150	68	51	35	22	17	17	1	-	361
Other Classifications	161	22	29	12	11	15	8	2	-	260
TOTAL PAID STAFF	1 752	513	439	320	220	220	131	47	2	3 644
Unpaid inoperatives	29	15	4	12	2	9	5	-	-	76
TOTAL STAFF	1 781	528	443	332	222	229	136	47	2	3 720

(a) Staff employed under the Public Service Act, operative and inoperative, being paid at the classification shown at 30 June 1987. The position of Australian Statistician is a statutory appointment under the Australian Bureau of Statistics Act 1975. (b) 1986 Population Census Data Transcription Centre located in Sydney. (c) Includes Research Officer classifications.

TABLE 5.3 TOTAL ABS STAFF BY CLASSIFICATION, EMPLOYMENT STATUS AND SEX
AT 30 JUNE 1987 (a)

Classification	Permanent			Temporary			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
FULL-TIME EMPLOYEES									
Australian Statistician	1	-	1	-	-	-	1	-	1
Senior Executive Service	29	1	30	-	-	-	29	1	30
Clerical Administrative (c)-									
Classes 10 and 11	60	7	67	-	-	-	60	7	67
Class 9	132	18	150	-	-	-	132	18	150
Class 8	196	32	228	1	-	1	197	32	229
Class 7	118	24	142	-	-	-	118	24	142
Class 6	228	57	285	-	-	-	228	57	285
Class 5	190	101	291	1	-	1	191	101	292
Class 4	254	163	417	-	1	1	254	164	418
Class 2/3	193	193	386	3	2	5	196	195	391
Class 1	121	104	225	20	23	43	141	127	268
Computer Systems Officer-									
Grades 4 and 5	33	-	33	-	1	1	33	1	34
Grade 3	41	11	52	-	-	-	41	11	52
Grade 2	85	7	92	-	-	-	85	7	92
Grade 1	69	20	89	-	-	-	69	20	89
Librarians	1	10	11	-	1	1	1	11	12
Clerical Assistants	122	216	338	21	50	71	143	266	409
Keyboard staff	6	339	345	-	-	-	6	339	345
Other classifications	168	78	246	3	8	11	171	86	257
TOTAL PAID STAFF	2 047	1 381	3 428	49	86	135	2 096	1 467	3 563
Unpaid inoperatives	42	34	76	-	-	-	42	34	76
TOTAL STAFF	2 089	1 415	3 504	49	86	135	2 138	1 501	3 639
PART-TIME EMPLOYEES									
Clerical Administrative (c)-									
Classes 10 and 11	1	-	1	-	-	-	1	-	1
Class 9	-	2	2	-	-	-	-	2	2
Class 8	-	1	1	-	-	-	-	1	1
Class 7	-	3	3	-	1	1	-	4	4
Class 6	-	3	3	-	1	1	-	4	4
Class 5	1	3	4	1	2	3	2	5	7
Class 4	1	3	4	-	-	-	1	3	4
Class 2/3	-	-	-	1	2	3	1	2	3
Class 1	-	1	1	1	4	5	1	5	6
Computer Systems Officer-									
Grades 4 and 5	-	1	1	-	-	-	-	1	1
Grade 3	1	1	2	-	-	-	1	1	2
Grade 2	2	7	9	-	1	1	2	8	10
Grade 1	2	-	2	-	-	-	2	-	2
Librarians	-	-	-	-	1	1	-	1	1
Clerical Assistants	-	1	1	3	10	13	3	11	14
Keyboard Staff	-	-	-	-	16	16	-	16	16
Other classifications	-	-	-	1	2	3	1	2	3
TOTAL PAID STAFF	8	26	34	7	40	47	15	66	81
Unpaid inoperatives	-	-	-	-	-	-	-	-	-
TOTAL STAFF	8	26	34	7	40	47	15	66	81

(a) and (c) See footnotes to Table 5.2.

TABLE 5.4 ABS STAFF RESOURCES EMPLOYED UNDER PROVISIONS OF THE CENSUS AND STATISTICS ACT, 1986-87

<i>Purpose</i>	<i>Staff years</i>
Household Surveys	228
1986 Population Census	1 100
TOTAL	1 328

TABLE 5.5 ABS SENIOR EXECUTIVE SERVICE STAFF, SALARY LEVEL, SEX AND LOCATION, 30 JUNE 1987 (a)

<i>Location</i>	<i>Salary level</i>				<i>Total</i>		
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>Men</i>	<i>Women</i>	<i>Total</i>
Canberra	16	1	7	1	24	1	25
New South Wales	-	1	-	-	1	-	1
Victoria	-	1	-	-	1	-	1
Queensland	1	-	-	-	1	-	1
Western Australia	1	-	-	-	1	-	1
South Australia	1	-	-	-	1	-	1
TOTAL	19	3	7	1	29	1	30

(a) Substantive SES staff only.

TABLE 5.6 ABS SENIOR EXECUTIVE SERVICE, INTAKE AND SEPARATIONS OF PERMANENT STAFF, 1986-87

<i>Method of intake/Type of separation</i>	<i>Total staff</i>
Intake -	
Appointment from employment outside the Australian Public Service	1
Promotion from Clerical Administrative classifications	4
TOTAL	5
Separations -	
Resignation	1
Retirement -	
Election by officer -	
Age 55-59 years	1
Age 60-64 years	1
TOTAL	3

TABLE 5.7 ABS SENIOR EXECUTIVE SERVICE, PROMOTIONS, 1986-87

<i>Salary level from which promoted</i>	<i>Salary level to which promoted</i>				<i>Total</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	
Promotions within the SES					
From level 3	-	-	-	1	1
From level 1	-	2	3	-	5
Promotions from Clerical Administrative Class 11	4	-	-	-	4
TOTAL	4	2	3	1	10

TABLE 5.8 ABS SENIOR EXECUTIVE SERVICE, FULL-TIME STAFF, SALARY LEVEL, AGE GROUP AND LENGTH OF SERVICE, 30 JUNE 1987 (a)

<i>Salary level</i>	<i>1-2</i>	<i>3-4</i>	<i>Total</i>
Age group (years) -			
30-34	-	-	-
35-39	4	1	5
40-44	5	3	8
45-49	8	2	10
50-54	3	1	4
55-59	2	1	3
60 and over	-	-	-
Length of service (years) -			
Under 5	1	-	1
5 and under 10	-	-	-
10 and under 15	2	1	3
15 and under 20	5	2	7
20 and under 30	12	4	16
30 and over	2	1	3
<i>TOTAL</i>	<i>22</i>	<i>8</i>	<i>30</i>

(a) Substantive SES staff only.

Appendix 6 FREEDOM OF INFORMATION STATEMENT

As required by section 8 of the *Freedom of Information Act 1982*, the following statement is given about the structure of the ABS and how members of the public can gain access to information held by it.

ABS establishment, organisation and functions

See pages 15 to 19 of this report.

Powers

The decision making powers of the ABS and other powers associated with the discharge of its functions affecting members of the public are: the power to collect statistics including the power to appoint agents, to ask or require persons to provide information, and to enter into premises other than private accommodation for the purpose of collecting statistics; the power to initiate prosecutions against persons failing to supply information; and the power to publish statistics and release information.

Consultative arrangements

See the references to the Australian Statistics Advisory Council (ASAC) and the annual Conference of Statisticians on pages 16 and 17 of this report.

Categories of documents

Documents open to public access upon payment of a fee - the ABS does not hold these types of document.

Documents available for purchase or customarily available free of charge - see pages 26 to 29 of this report.

Other documents -

Government and Parliament: various policy-related documents; ministerial briefings; ministerial correspondence; replies to parliamentary questions; and tabling documents.

Conferences etc: agenda papers, submissions, and records of proceedings of internal and external conferences, management meetings, workshops etc.

Statistical and statistical service projects: research, development and evaluation papers; records of consultations with suppliers and users of data; statistical classifications; lists of businesses etc; maps; data collection, processing and publication manuals and instructions; mailing lists; statistical returns; and statistical data holdings.

Administration and management: work program and planning documents; finance, staff and establishment papers; personnel files; files relating to recruitment, selection and promotion of staff; staff development and training papers; office services documents; and tenders.

General: correspondence, papers etc filed by subject; manuals on more general subjects; reviews and administrative circulars.

Where to get information

The ABS offers an initial contact point, for all requests for access to documents and information, by means of a central information service located within an Information Services Section in each of the ABS Central and regional offices, as listed below:

Australian Capital Territory (Central Office)

Telephone: (062) 52 6627, 52 6007, 52 5402
Mail: PO Box 10, Belconnen ACT 2616
Counter: Reception desk, Wing 5, Cameron Offices, Chandler Street, Belconnen

New South Wales

Telephone: (02) 268 4611
Mail: GPO Box 796, Sydney NSW 2001
Counter: 3rd Floor, St Andrew's House, Sydney Square, Sydney

Victoria

Telephone: (03) 652 6139
Mail: GPO Box 2796Y, Melbourne VIC 3001
Counter: 8th Floor, Commonwealth Banks Building, Cnr Elizabeth & Flinders Streets, Melbourne

Queensland

Telephone: (07) 222 6351
Mail: GPO Box 1160, Brisbane QLD 4001
Counter: 20th Floor, 313 Adelaide Street, Brisbane

Western Australia

Telephone: (09) 323 5140
Mail: GPO Box K381, Perth WA 6001
Counter: Level 1, Merlin Centre, 30 Terrace Road, Perth

South Australia

Telephone: (08) 228 9439
Mail: GPO Box 2272, Adelaide SA 5001
Counter: Ground Floor Annexe, Capita Centre, 10-20 Pulteney Street, Adelaide

Tasmania

Telephone: (002) 20 9409
Mail: GPO Box 66A, Hobart TAS 7001
Counter: 3rd Floor, Australian Government Centre, 175 Collins Street, Hobart

Northern Territory

Telephone: (089) 81 5222
Mail: GPO Box 3796, Darwin NT 5794
Counter: 5th Floor, MLC Building, 81 Smith Street, Darwin

Freedom of information inquiries

All inquiries concerning access to documents under the *Freedom of Information Act 1982* may be directed on weekdays, between 8.30 am and 4.30 pm to the Assistant Statistician, Co-ordination Branch, Australian Bureau of Statistics, Room 4a501, Cameron Offices, Chandler Street, Belconnen, ACT 2617, telephone (062) 52 5256.

Freedom of Information Act - ABS activities during 1986-87

Facilitating access to available statistical information, subject to the confidentiality provisions of the Census and Statistics Act, is a major function of the ABS and application of the provisions of the Freedom of Information (FOI) Act within the ABS needs to be viewed against that background. The table below provides details of FOI activities during the years 1982-83 to 1986-87 inclusive.

FOI ACTIVITIES 1982-83 TO 1986-87

	1982-83 (a)	1983-84	1984-85	1985-86	1986-87
	Number				
Requests received -					
For statistical information	-	9	15	15	9
For personal papers	1	2	9	3	3
For administrative documents	-	5	5	5	6
<i>Total</i>	<i>1</i>	<i>16</i>	<i>29</i>	<i>23</i>	<i>18</i>
Decisions made -					
Access granted in full	-	6	14	7	9
Access granted in part	-	7	7	7	5
Request transferred to another agency	-	3	2	2	-
Request withdrawn	-	-	2	3	3
Access refused (b)	-	-	3	1	1
Documents not in existence	1	-	-	1	-
<i>Total</i>	<i>1</i>	<i>16</i>	<i>28</i>	<i>21</i>	<i>18</i>
Decisions outstanding at end of year	-	-	1	3	-
Review of decisions by principal officer -					
Decision upheld	-	1	1	2	-
<i>Total</i>	-	<i>1</i>	<i>1</i>	<i>2</i>	-
Appeals to Administrative Appeals Tribunal -					
Appeal disallowed	-	-	-	1	-
<i>Total</i>	-	-	-	<i>1</i>	-

(a) Seven months, 1 December 1982 to 30 June 1983. (The FOI Act came into operation on 1 December 1982.) (b) In accordance with the provisions of sections 38, 40, 41, 42, 43 and 45 of the FOI Act.

All of the requests were responded to within the statutory time limit. In 1986-87 the average time taken to respond was 33 days and a total of \$186.64 was collected in fees and charges, although some of this related to charges levied in 1985-86.

Comprehensive information on the Act has been supplied to all ABS staff. Responsibility for matters relating to the operation of the FOI Act within the ABS is exercised by the Co-ordination Branch in Canberra, and authority for decision-making under the Act has been delegated to the Assistant Statistician (a Senior Executive Service, Level 1 officer) in charge of that Branch. Officers of the Branch have continued to attend regular meetings of the FOI Practitioners' Forum arranged by the Public Service Board, as well as training courses run in conjunction with the Attorney-General's Department.

Work entailed in implementing provisions of the FOI Act during 1986-87 has engaged about half of the time of one middle-level officer during the year, plus the attention from time to time of a number of other officers - a total of somewhat less than one staff year.

Appendix 7 DOCUMENTS TABLED IN PARLIAMENT: 1986-87

Proposals for collection of statistical information (a)

In accordance with section 6(3) of the *Australian Bureau of Statistics Act 1975*, the following proposals for collection of additional information for statistical purposes were tabled in both Houses of Parliament during 1986-87.

<i>Date tabled</i>	<i>Project</i>
21 August 1986	Survey of family formation, September 1986. Survey of participation in the delivery of voluntary welfare services in New South Wales, October 1986. Survey of use of domiciliary support services in Victoria, October 1986. Survey of usage of legal services in the community in Queensland, October 1986. Survey of water using appliances in Western Australia, October 1986. Survey of type and conditions of part-time employment in South Australia, October 1986. Survey of usage of public libraries in Tasmania, October 1986. Survey of alcohol, tobacco and analgesics consumption patterns in the Northern Territory, October 1986. Survey of income, current and alternative working arrangements and accommodation costs, September-November 1986 and February-March 1987. Survey of major labour costs, 1985-86.
26 November 1986	Survey of the computing needs of small enterprises - South Australia, February 1987.
20 March 1987	Services industries surveys, 1986-87 and 1987-88. Survey of wholesale trade, 1986-87.
1 April 1987	Survey of household water usage in New South Wales, July 1987. Survey of crime prevention and sentencing in Victoria, July 1987. Survey of community attitudes to crime prevention in Queensland, July 1987. Survey of non-commercial fishing activities in Western Australia, July 1987. Survey of smoking in South Australia, July 1987. Resident profile survey in the Northern Territory, July 1987.

(a) Unless otherwise indicated by their titles, the statistical collections listed were national projects.

Disclosure of lists of names and addresses

In accordance with clause 6 of the Determination (Statutory Rules 1983 No. 19) made under section 13 of the Census and Statistics Act 1905, details of the following disclosures of lists of names, addresses and other information to the specified department or authority were tabled in both Houses of Parliament in 1986-87.

<i>Date tabled</i>	<i>Information released</i>
23 February 1987	Names and addresses of plastics manufacturing establishments for the Department of Employment and Industrial Relations.
25 February 1987	Names and addresses of agricultural establishments for the Australian Meat and Livestock Corporation.
25 March 1987	Names and addresses of agricultural establishments for the Bureau of Agricultural Economics.

Appendix 8 EXTERNAL CONSULTANCIES: 1986-87

	<i>Expenditure</i> \$
Public relations and publications	
<i>Consultants are used to supply specialist services, such as video production, researching, writing and designing promotional material, and media liaison and media awareness training, that cannot be supported on a full time basis by the ABS.</i>	
Tobin Lazar Connection	23 640
Production of a video presentation on the 1986 Population Census (Census '86)	
Armak Productions	450
Production of videotape of information seminars	
Grey Advertising (NSW) Pty Ltd	961
Preparation of a report on Census '86 public relations campaign	
Richard Croll and Co	1 490
Conduct of a media awareness training course for ABS media contact officers for the 1987 Agricultural Census	
Turnbull Manallack Pty Ltd and Turnbills	8 511
Development of public relations campaigns for the 1985-86 Retail Census and the 1986-87 Services Industries Survey	
Queensland Public Relations (QPR)	2 546
Provision of general public relations assistance - Queensland office	
Economic Information Service	600
Preparation of an explanatory leaflet for Population Census pre-tests	
Professional Public Relations Canberra Pty Ltd	34 602
Several consultancies including -	
preparation of promotional material and video news clips for Census '86	
assistance with media liaison and briefings for Census '86	
development of the public relations campaign for the 1987 Agricultural Census	
design of promotional material for the Tasmanian Year Book	
Dr C. Hazlehurst and Prof. C. Forster	22 300
Preparation of a history of Australian official statistics for inclusion in the 1988 Bicentenary issue of Year Book Australia	
Media Graphics	28 805
Graphic design for Census '86 and other public relations display and explanatory material	
MGL Visual Communication	3 361
Graphic design work	
Grafis	480
Graphic design work	

Training

Consultants are engaged to conduct training presentations for ABS staff where insufficient expertise exists within ABS to provide the training, and for presentation of sessions by experts in specialist fields.

Prof. D. Dunphy and J. Buggy	6 700
Expert consulting services and provision of training to ABS senior management in principles and practices of participative work design	
R. Fergie	5 620
Development of training documentation for ABS National Statistical Systems training courses	
L. Glendenning	1 800
Conduct of stress management courses	
Management Technology Education Pty Ltd	5 590
Conduct of a critical skills course for executive secretaries	
H.R.M. Consulting Pty Ltd	3 980
Conduct of management workshops - NSW office	
R. Paul	2 500
Conduct of a middle management workshop - NSW office	
Improved Reading	2 300
Provision of efficient and speed reading courses - NSW office	
P. Kell and G. Peck	2 800
Provision of expert assistance to senior management workshop - Victorian office	
D.J. Ryan	4 777
Conduct of a counselling workshop and a senior management course - SA office	
V. Noga	2 450
Conduct of a senior officers' workshop - Tasmanian office	
MSL Wharton	690
Development of an occupational health and safety preventative program - Northern Territory office	
NIXDORF	14 460
Training for Data Entry staff in the use of data entry equipment	
SPL	14 410
Training for specialist staff in the ADABAS/NATURAL database management system	
Other	1 162
Several consultants for session leading and presentation of specialist papers at ABS training courses	

Other general consultancies

Consultants are used to provide expert advice and impartial review of ABS performance in specific areas of management and statistical operations.

Touche Ross Services Pty 12 015

Conduct of a post-implementation evaluation of the Joint Management Review

Communication Research Institute of Australia 42 486

Following the external review of the effectiveness of ABS statistical collection forms, the consultant assisted with the development of standards and guidelines for ABS forms, advised an ABS Forms Management Committee, and conducted training sessions in forms design, forms evaluation and the use of electronic forms design methods

R. Stuckey 26 138

Provision of expert advice on occupational health, especially RSI

ADP technical consultancies

Specialist ADP skills not available within the ABS are used to help implement system requirements for ADP services.

NIXDORF 1 285

Development of facilities to support the use of check digits for error control in ABS data entry procedures

SCP Consultants 10 260

Analysis of usage of time sharing system to produce savings in prime time CPU cycles

Appendix 9 **PROFESSIONAL PAPERS PRESENTED BY ABS OFFICERS: 1986-87**

During 1986-87 officers of the ABS prepared the following professional papers:

D.N. Allen: *Training Opportunities Provided by Australia*. Presented to the South Pacific Commission's Seventh Regional Conference of Statisticians, Cook Islands, June 1987.

A.J. Barbetti: *Classification of Data in Australian Input-Output Tables and Related Issues*. Presented to the Eleventh Meeting of the Australian and New Zealand Regional Science Association, Sydney, December 1986.

B.F. Bird: *Control of Modifications to the ABS Computing Environment*. Presented to the Fujitsu Users' Association of Australia Inc., Perth, June 1987.

A. Brauer: *Integration of Land Related Data: An Introductory Discussion of General Concepts*. Presented to the Urban and Regional Planning Information Systems (URPIS 14) Conference, Melbourne, November 1986.

I. Castles: *The Role of a National Statistical Office*. Presented to the Canberra Branch of the Statistical Society of Australia, Canberra, October 1986.

I. Castles: *Comparison of Income Levels: Australia and Other Countries*. Presented to a Conference on Recent Economic Growth, Canberra, November 1986.

I. Castles: *Social Statistics and Social Change*. Presented to the Third National Conference of the Australian Population Association, Adelaide, December 1986.

I. Castles: *Government Welfare Outlays: Who Benefits? Who Pays?* Presented to the ACT Division of the Royal Australian Institute of Public Administration, Canberra, April 1987.

C. Choi, D. Steel and J. Cornish: *Adjusting Census Counts for Under-enumeration - The Experience with the 1981 Australian Post-enumeration Survey*. Presented to the ESCAP Regional Working Group on the 1990 World Population and Housing Census Program, Bangkok, November 1986.

C. Choi and L. Ruzicka (a): *Recent Trends in Fertility and Family Formation*. Presented to the Third National Conference of the Australian Population Association, Adelaide, December 1986.

G.D. Cocking: *The Tasmanian Population - Demographic Characteristics*. Published in Transactions of the Menzies Foundation, Vol. 13, 1987.

J. Cornish: *1986 Census of Population and Housing: Issues in Planning for Future Population Censuses*. Presented to the Third National Conference of the Australian Population Association, Adelaide, December 1986.

J. Cornish: *Proposed Outputs from the 1986 Census of Population and Housing*. Presented to the Urban and Regional Planning Information Systems (URPIS 14) Conference, Melbourne, November 1986.

(a) L. Ruzicka is not an ABS officer.

J. Cornish: *The Australian Census of Population and Housing, 1986*. Presented to the ESCAP Regional Working Group on the 1990 World Population and Housing Census Program, Bangkok, November 1986.

J. Cornish: *1986 Census of Population and Housing: Mid-decade Report*. Presented to the Eleventh Asian and Pacific Population Census Conference, Sydney and Canberra, February 1987.

J. Cornish and J. Paice: *Topic Selection for the Australian Census of Population and Housing*. Published in *Journal of Official Statistics*, Vol. 2, No. 4, 1986.

J. Coughlan and J. Paice: *1986 Census of Population and Housing: Ethnicity Data*. Presented to the Third National Conference of the Australian Population Association, Adelaide, December 1986.

R. Ferenczi: *Bringing a Fujitsu Printer into the Desktop Publishing World*. Presented to the Fujitsu Users' Association of Australia Inc., Perth, June 1987.

B. Fogarty and D. Williams: *Integration of Land Related Data: A Discussion Highlighting Past and Proposed Future Planning*. Presented to the Urban and Regional Planning Information Systems (URPIS 14) Conference, Melbourne, November 1986.

D.C. Leaver and D.G. Steel (in conjunction with New Zealand Department of Statistics): *Designing Labour Force Surveys - Two Countries' Experience*. Presented to the South Australian Branch of the Statistical Society of Australia, Adelaide, August 1986.

J. Paice and D.W. Black: *1986 Census of Population and Housing: Enumeration of the Aboriginal and Torres Strait Islander Population*. Presented to the Eleventh Asian and Pacific Population Census Conference, Sydney and Canberra, February 1987.

N.K. Patterson: *Some Insights into Balance of Payments Statistics*. Presented to the Business Modelling and Forecasting Group, New South Wales Branch of the Statistical Society of Australia, Sydney, October 1986.

D. Scoullar: *Some Notes on the Measurement of Services in Australia's Balance of Payments Statistics*. Presented to the Trade in Services Group of the Trade Development Council, Sydney, February 1987.

P.A. Simpson and D.J. Trewin: *ABS Small Area Statistics*. Presented to a Seminar on Information in Local Government Decision Making, Canberra, May 1987.

G.C. Sims: *Integrated Statistical Arrangement - A Case Study in Commonwealth/State Cooperation*. Presented to the South Australian Division of the Royal Australian Institute of Public Administration, Adelaide, June 1987.

D.J. Trewin: *Official Statistics for Small Areas - Limitations and Possible Solutions*. Presented to the Queensland Branch of the Statistical Society of Australia's Symposium on Small Area Statistics, July 1986.

D.J. Trewin: *Improving Response Rates for the Annual Manufacturing Census*. Presented to the US Bureau of the Census' Third Annual Research Conference, Baltimore, March 1987.

Appendix 10 THE ROLE OF A NATIONAL STATISTICAL OFFICE

This is an abridged version of an address given by the Australian Statistician, Mr Ian Castles, on 28 October 1986, to the Canberra Branch of the Statistical Society of Australia.

In the weeks following my appointment as Australian Statistician, I made the pleasing discovery that the heads of official statistical agencies constitute a sort of international college or club. Letters were written by the dozen, formally conveying to the heads of statistical offices in other countries the information that I was now their Australian counterpart; and responses were received by the dozen, congratulating me on my appointment and wishing me a fruitful and successful term of office.

One of these letters was a source of particular delight to me. From the Director, Federal Office of Statistics, Lagos, Nigeria came a warm and spirited letter which included this paragraph:

Out here your Nigerian counterpart occupies a hot seat. His work, as with all statisticians, is never done. He takes the blame real or imagined for the convulsion afflicting the economy as a result of what is tagged 'lack of sufficient data'! Ever heard of sufficient data? Hope you will be spared such pains.

The Australian Bureau of Statistics undoubtedly produces a more comprehensive range of economic and social data than Nigeria is able to afford, but we too have been obliged to limit our efforts to match the more austere regime which the Bureau - along with most government agencies - is now confronting.

So it was that, after the Budget was brought down, I had to inform some of our important users that the Bureau would be unable to conduct a manufacturing census this year. This census had been conducted in every year since 1907, with only one exception; and the news that there would not be a manufacturing census this year has naturally evoked some strong protests from those who were counting on making use of the information which would have been produced. They have claimed, not without justification, that there will be a 'lack of sufficient data' for their purposes, and therefore for the nation's purposes.

I did not really expect to be spared the pains to which the Nigerian Statistician referred in his letter to me. Nor was I concerned at the criticisms that were made of the decision not to conduct the manufacturing census this year. It would have been a matter of far greater concern if there had not been criticism. That does not mean that the decision not to conduct this year's manufacturing census was wrong. Such issues can only be addressed as part of a wide-ranging examination of the costs and benefits, direct and indirect, of alternative options for scaling-down a planned work program in response to budgetary necessity.

This evening I would like to discuss with you several questions which relate to the role of the Australian Bureau of Statistics as a national statistical office, and to the way in which statistical priorities are (or should be) determined.

What are statistics?

I will not insult members of the Statistical Society of Australia by implying that you do not know what statistics are. But I will remind you of the origin of the word, because it is too often forgotten.

Here is how the Encyclopaedia Britannica used to begin its article on 'statistics':

STATISTICS. The name statistics was first applied to collections of data relating to matters important to the State, ... and to the study and interpretation of such data. The data were not at first numerical ... but the precision and convenience of data expressed in numbers ... have led to ... the common use of the term 'statistics' as if it related exclusively to data expressed in numerical form ...

— Encyclopaedia Britannica, 1960s edition

And here is the entry under 'statistics' in the Oxford English Dictionary:

STATISTICS. In early use, that branch of political science dealing with the collection, classification, and discussion of facts (especially of a numerical kind) bearing on the condition of a state or community. In recent use, the department of study that has for its object the collection and arrangement of numerical facts or data, whether relating to human affairs or to natural phenomena.

In discussion, the word 'statistical' is often used as if it is synonymous with 'mathematical'. The ABS has many very able mathematical statisticians, and they will always be valued within the organisation for their skills, which are a necessary and very important ingredient in the overall mixture of talents which a national statistical organisation requires. But it must not be forgotten that, for the Bureau, mathematics are one of the means used to achieve our ends. The ends are related to 'statistics' - that is, to collecting, compiling, analysing and disseminating information about the state of the nation and of its people. If this can be done without requiring higher mathematics, or even high standards of numeracy, among the users of statistics, so much the better.

What are the functions of the ABS?

The broad functions of the Bureau are implied in what I have just said. They are specified legislatively in section 6 of the *Australian Bureau of Statistics Act 1975*, which defines the Bureau's functions so as to place the Australian Bureau of Statistics at the centre of a highly centralised and integrated national information system. The distinctive characteristics of Australia's national statistical system are most clearly seen by comparing its organisation with that which exists in some other countries.

Consider, for example, the statistical organisation in Britain, the country from which Australia inherited the key features of its overall machinery of government. The collection of the statistics which in Australia are provided from the manufacturing census are the responsibility of a Department of State: the Department of Industry and Trade. The collection of statistics relating to employment, earnings and consumer prices are the responsibility of another Department of State: the Department of Employment. The Central Statistical Office is a separate organisation within the Cabinet Office. It had its origins in a decision of Mr Churchill, in the early days of World War II, to establish an agency to produce 'a regular series of figures on a coherent and well-ordered basis covering the development of our war effort'. The Office is now responsible for compilation and analytical functions similar to those carried out within the Economic Accounts Division of the ABS.

The national statistical service in the United States is also a decentralised one. Manufacturing censuses, and the conduct of industry collections generally, are handled by the Bureau of the Census within the Department of Commerce. That agency also performs 'central statistical office' functions, and conducts censuses of the population. But statistics relating to employment, earnings and consumer prices are, and have been for more than a century, the

responsibility of the Bureau of Labor Statistics; and the collection, compilation, analysis and dissemination of what are known as vital statistics - the traditional heart of a nation's statistics - are undertaken by the National Centre for Health Statistics.

The philosophy implied in the centralised or integrated approach to statistics which is followed in Australia and most other OECD countries - though not, as I have said, in the United States or Britain - is that there are coherent relationships between the elements of a national statistical system. These can most effectively be exploited if a single central agency is responsible for conducting all of the major statistical collections as well as for co-ordinating the statistics which are created as a by-product of administrative activities.

Is there a lack of sufficient statistical data in Australia?

At first glance, the answer to this question seems obvious. There are always, and there will always be, unmet statistical needs: demands for more statistical data which we are unable to satisfy. As resource constraints intensify, more and more needs cannot be met.

And yet there is a sense in which we can, and perhaps do, have more statistical data than we can cope with. Against the Nigerian Statistician's rhetorical question 'Ever heard of sufficient data?' we can set the problem posed by a statistician at a recent seminar conducted by Eurostat, the Statistical Office of the European Communities:

What we basically lacked, once the computer could provide us with a richer supply of information, was a set of EDP techniques permitting the 'projection' of this increasingly rich stream of information (in a high-dimension space) on to a space which can be apprehended by the decision-maker.

- From Jacques A. Zighera, Université Paris X (Paris - Nanterre), Eurostat, 'Recent Developments in the Analysis of Large Scale Data Sets', p. 304.

In other words, EDP technology has provided statisticians with an awesome capacity to supply information, but not with a corresponding capacity to present it in a form which can be absorbed and comprehended by the users of statistics.

Nor can the problem of having more statistical data than users can digest be attributed entirely to the advent of the computer. In 1929 my predecessor Charles Wickens - a very great statistician indeed - pointed out that:

In statistical compilation, as in the game of chess, the number of combinations of moves is infinite; what the statistician desires to know is which untried combinations are likely to be serviceable, and then what their combination is likely to cost.

- C.H. Wickens, Commonwealth Statistician, Address to Industrial Peace Conference, February 19, 1929.

Since Wickens' time, computers have massively increased the number of combinations (if an increase on infinite is possible); but they have also enabled the number of 'serviceable combinations' to increase. Indeed, the number of possible combinations is increasing each year as computer hardware and software becomes more sophisticated. This has made the choice of combinations even more difficult.

There is an analogy here with computer chess. In the early days of the game, a good player could beat the computer without too much difficulty. Now the standard of computer chess has improved to such an extent that only a handful of players can beat the most sophisticated computer chess player.

One way of portraying the task of the ABS is to conceive of the Statistician and his colleagues as seeking to ensure that the combination of activities which the organisation pursues is best addressing the contemporary needs of users, having regard to the resource constraints of which I have already spoken. I hope that we have the corporate capacity to be among the handful of players that can still beat the statistical computer!

What role should the ABS have in the analysis of statistics?

The Australian Bureau of Statistics Act states that the functions of the Bureau include, *inter alia*, that of *analysing* statistics and related information.

Before discussing what the Bureau's analytical function might or might not entail, I would like to quote from two letters I have received in recent weeks. Both of them are from respected scholars who have made extensive use of ABS data over the years.

One of these letters referred to 'alarming rumours' that the Bureau 'is unlikely to release further unit record tapes from the major socio-economic surveys'. The researcher went on to say that, if unit record tapes could not be released

then my strong preference would be for the privatisation of the major socio-economic surveys. This would reduce the quality of the data, but to my mind available data is much to be preferred to data locked away.

In fact, the ABS *will* be continuing to release magnetic tapes of unidentifiable unit record data from all of its major social surveys. But the comment is of interest in that it shows that this researcher sees the Bureau solely as a *collector* of socio-economic data. It implies that such collections can serve no purpose unless individual records can be made available for the use of analysts outside the ABS. They also imply that there is little value in any information that could be made available as a result of the Bureau itself producing tabulations.

The other letter from which I want to quote is from Professor W.D. Borrie, the eminent demographer. Professor Borrie stated that he had

long held the view that an important function of the Bureau should be to present reviews of trends in subjects that have a significant bearing on policy matters, in a way that can be easily read and comprehended by the public at large.

After complimenting the Bureau on several publications which in his view served this function, Professor Borrie concluded:

May I now make a plea that the Bureau should consider reviving that splendid document which ceased in 1961, but which until then gave the Australian people a real feeling of what the national censuses were about - THE STATISTICIAN'S REPORT ... This computer age is a great boon for the experts and specialists, but the general public never quite knows why they have to answer all those personal questions every five years. We need a STATISTICIAN'S REPORT more than ever before if the public is to recapture the value for their money which they got up to 1961.

The role of the Bureau which is implied in Professor Borrie's comments seems to me to be more consistent with the statutory functions of the ABS, and with what is expected of the Bureau by Commonwealth and State Governments and by the community generally, than the role implied in the comments of my other correspondent.

It is clear, however, that there are genuine concerns about whether an official statistical agency should be involved in the analysis of statistics. Perhaps such concerns are less a reflection of differences of view about the proper role of an official statistical agency, and more a reflection of different perceptions about what constitutes 'analysis'. Let me elaborate.

The Australian Bureau of Statistics Act, which established the Bureau's independence and defined its functions, was an outcome of the recommendations of the Committee on Integration of Data Systems, which reported in 1974. That Committee, which was chaired by the late Professor L.F. Crisp of the Australian National University, had this to say about the role of the Bureau in analysis and research activities:

The Committee agrees that there would be advantages in a closer link between conceptual development and statistical analyses in research projects. The official statistical service is, however, unique among the agencies of government in that maintenance of its credibility is critically dependent on it being recognised, at all times, as an objective professional organisation which is and should be insulated from the qualitative aspects of policy-formulation. In the Committee's opinion, the statistical service must make its professional contribution to consideration of policy-issues and respond rapidly to policies once they are decided. It should not be seen, however, as being persuasive or influential in determining those policies. In principle, the Committee would see dangers in a direct organisational association of the Bureau with a research unit which exists primarily to explore and research possible new policy options. At the same time, the Committee fully recognises and stresses the importance of the contribution professional statisticians can make if they are involved, from the outset, in such research projects.

In short, the Committee warned against the involvement of the official statistical agency in the exploration of, and the giving of advice upon, new policy options. Apart from that, the Committee clearly saw advantage in the Bureau being fully involved in the analysis and interpretation of the data on which policy advice relies, and to be sensitive to the needs of those responsible for advice and for the conduct of the research supporting policy advice.

This position is entirely consistent with the views of most experts who have reflected upon what the role of an official statistical agency should be. For example, Sir Claus Moser, former Head of the Central Statistical Service in the United Kingdom, had this to say in an article written in 1977. As Sir Claus was addressing himself to 'the environment in which statistical offices will operate in 10 years time', his comments are of particular relevance today:

Above all, policy makers in government will accept from their statistical offices not so much the production of more data as, increasingly, their analysis and interpretation. The aim will be 'to collect less and to use more' and understandably so. Analytical studies, rather than mere presentations, will be expected of the statistical offices of the 1980's, with, amongst other things, advances in the statistical base for economic and social forecasts. Statisticians will be expected to come more out into the open in assessing their figures in terms of quality and interpreting their meaning. Figures will be expected to have 'quality labels' attached to them. The greater interpretative role will demand a more outward going, politically sensitive approach (which, one must stress, should and can go hand in hand with total professional integrity).

Very similar views were expressed in a 1975 article by Janet Norwood, who was later to become Director of the United States Bureau of Labor Statistics:

Should those who produce statistics also analyse them? Yes. How far should they go with these analyses? As far as resources permit, provided that objectivity is maintained and policies and speculation are avoided. Agencies which produce statistics should engage in an extensive and far reaching program of research and analysis aimed at the impartial and knowledgeable dissemination and understanding of their data.

Janet Norwood also pointed out that the aim of every government statistical system is the establishment of arrangements to foster the production of accurate, timely, relevant and impartial statistics. She stated that this goal can be best achieved

when the agencies responsible for production of data also assume responsibility for publication and analysis of them. The combination of analytical and survey skills in a single organisation can, more than any other factor, serve to ensure that the data developed are suitable for the purpose intended.

On the basis of these observations, the discussion in the Crisp Committee Report and my own opinion as someone who was extensively involved in policy advice to government over many years before my recent appointment as Australian Statistician, I would summarise the case for the involvement of the official statistical agency in the analysis of statistical data in these terms:

- (1) Competent analysis of data requires a thorough understanding of and familiarity with the microdata being analysed. The further analysts are from the microdata, the more likely it is that the full potentialities of the data will not be exploited and the greater is the possibility that the data will be misinterpreted.
- (2) Analysis can lead to substantial improvements in the source data, because it helps those involved to identify shortcomings that might exist in the data and focuses their attention on what is needed. It is better to have an imperfect measure which is relevant than a perfect measure which is not.
- (3) Analysis adds value to the statistical output, and improves user understanding.
- (4) Statistical agencies are regarded as impartial. Whilst they must ensure that their reputation for objectivity is not prejudiced by comments that might be regarded as partisan or selective, there are opportunities for improving public understanding of complex issues if those responsible for collecting and compiling data devote their best efforts to explaining what the data show.

There was a time many years ago when the presentation of economic indicators such as employment, production or prices in terms of percentage changes compared with the corresponding period of the preceding year was considered to be an impermissible exercise in interpretation; and the preparation of national accounts was viewed by many as a rather dangerous exercise for an official statistical agency to undertake.

Whilst the accuracy of some of the Bureau's statistics has been challenged from time to time, the objectivity of the ABS has never, to my knowledge, been seriously questioned. It is generally accepted, I believe, that the Bureau has a proper role in:

- (1) Interpreting statistical data and presenting those interpretations in verbal and graphical forms, so that users can more easily understand the main features of the data presented.

- (2) Presenting facts (not conjectures) which may help to explain movements in statistics, and commenting on the quality of statistics (including on non-sampling errors as well as the more easily measured sampling errors).
- (3) Adjusting statistics for seasonal and price movements so that users can more readily interpret movements in series over time. The progressive introduction of smoothed seasonally adjusted series by the ABS should assist users to reach a better understanding of the significance of month-to-month movements.
- (4) Bringing together a number of statistical series within a conceptual framework which clarifies their inter-relatability. Statistics such as the national accounts, the balance of payments and input/output tables are basically analytic devices for translating large masses of data into 'serviceable combinations'.
- (5) Producing meaningful statistical output using data from different sources, and using statistical analysis techniques to mesh this data together.

The last of these types of activities has perhaps received less attention than the others, but I believe it to be potentially very important.

Official statistical agencies have always used a certain amount of administrative data for statistical purposes - e.g., the use of customs data to provide overseas trade statistics and of the records of Registrars to obtain statistics on births and deaths. There has, however, been some reluctance to rely too greatly on administrative data because of the quality deficiencies which are inevitable in the use of data which was not collected primarily for a statistical purpose. The problems which arose in Australian statistics of employment and earnings because of the reliance for many years on data which emerged as a by-product of payroll tax administration is an obvious example.

I believe the reluctance to rely too heavily on administrative by-product data may now have gone too far, particularly in an environment in which resources for statistical censuses and surveys are severely constrained. Instead of complaining about the quality problems in administrative data, there is a case in favour of statisticians exerting their responsibilities more aggressively. There is scope for demonstrating to administrators that it is important to maintain the quality of the statistics produced from administrative processes.

Greater use of administrative data offers the prospect of enriching our data base, particularly if the administrative information is supplemented intelligently by data which is directly collected by the ABS. The task will challenge the ingenuity and inventiveness of our mathematical statisticians.

I would like to give two examples only:

- (1) Income taxation data is a valuable source of information about the income characteristics of individuals and families in small areas. This data source has been tapped by official statistical agencies in many overseas countries, including Canada and New Zealand. This is an area that the ABS needs to investigate.
- (2) We are planning to run an annual survey of labour costs to fill a long-standing data deficiency. One possibility being investigated is that of imputing many of the non-wage data items (e.g. workers' compensation, payroll tax, etc) from administrative data sources, and using directly collected data to provide benchmarks at intervals of (say) 5 years. This approach to the measurement of non-wage labour costs has been used successfully in the United Kingdom.

Where do we go from here?

Discussion of the prospects for making greater use of administrative by-product data has taken me into an important aspect of my last question about possible future directions for the Bureau. The possibility of producing a report on the 1986 Census, as suggested by Professor Borrie, is one area of development to which we are giving serious consideration; there are many others which are represented by the Bureau's rapid movement towards the more extensive use of electronic media for the dissemination of data.

This evening, I will confine myself to telling you a little about a project which is under way in the ABS. Its purpose is to measure the distributional impact of taxes and government benefits on household incomes.

The Household Expenditure Survey provides a valuable data base of income and expenditure data for different types of households, including those households reliant on government benefits as their main source of income. It provides a basis for evaluating the effect of various types of taxes, including indirect taxes, on the income of different types of households. Similarly, it provides a basis for allocating government benefits to households - including non-cash benefits such as health and education services. Distributing taxes and benefits to households requires the use of a number of assumptions and analytical techniques to mesh data available from other sources (e.g. on government outlays) to the household expenditure survey data base. The United Kingdom has been undertaking such studies for many years.

The ABS is now well advanced on this project, using data from the 1984 Household Expenditure Survey. We are being assisted by an advisory panel which includes two academic experts as well as officials from several Commonwealth Government departments and agencies. The case for the ABS undertaking a study of this kind rests essentially on our capacity to draw together the available data, and to make use of a combination of human resources and computer capacity which cannot be marshalled for this purpose by any other organisation in Australia.

I am confident that the output of the project will assist many users of statistics to assess the implications of important aspects of the impact of governmental activities on Australian households. It is also serving as an example of how the resources of the ABS and the skills of its professional experts can be developed, in close consultation with those who are best qualified to identify the needs and interests of users, to support a better information base for important areas of public policy.

In the Second Reading Speech introducing the Australian Bureau of Statistics Act 1975, the Hon. Lionel Bowen, M.P., now the Deputy Prime Minister, said that:

There is no need for me to argue the virtues of statistical information in providing a generally informed society; in providing a firm basis for decision-making in Government, business and the rest of the community; in providing a basis for the development of programs and a means of measuring their progress over time.

I believe that the role and course of development of the Australian Bureau of Statistics which I have outlined this evening is fully consistent with the spirit of those comments from Mr Bowen's Speech, as well as with the letter of the legislation which he introduced. It continues the direction of development which was followed by the Bureau during the period that my predecessor, Mr Roy Cameron, was Australian Statistician. In pursuing this course, I have the full and enthusiastic support of the senior staff of the Bureau. I expect that I would also have the support and interest of members of the Australian Statistical Society, and I look forward to a close and harmonious relationship with you in the years ahead.